

Using Technology to Help ESL/EFL Students Develop Language Skills

Renee Ybarra

Rybarra7 [at] aol.com

C.C. Lambert Elementary (Tustin, California, USA)

Tim Green

tgreen [at] fullerton.edu

<http://faculty.fullerton.edu/tgreen/>

California State University (Fullerton, California, USA)

The article premise is that technology can be used as an effective teaching tool for English language learners. The authors discuss a variety of research illustrating how teachers can help English language learners develop their language skills through the use of technology.

Introduction

Teaching students to be literate is a high educational priority in the United States, as it is throughout the world. Though this area is one of our greatest priorities, it is also one of our greatest challenges. The classroom environment has changed from many years ago. Teachers face the challenges of a large population who do not speak English and have high transient rates.

For this large population, becoming proficient in a new language is a very difficult transition. This process can be frustrating and sometimes painful. Students learning a new language need as much language support as possible. Those who have taught students learning English as their second language know that any language support is helpful for their language acquisition. English language learner (ELL) students need a variety of language experiences. They need to hear language, write language, speak language and read language.

We believe that computers can play an integral part in providing ELL students with valuable language experiences as they learn a new language. This article focuses on how computer-assisted instruction (CAI) can be a supplemental teaching tool for teaching English language learners. Additionally, a discussion of the benefits that have been found in using CAI with ELL is also provided.

Verbal Interaction

According to Liaw (1997), teachers should offer English language learners a language-rich environment in which students are constantly engaged in language activities. Children need to be able to interact with each other so that learning through communication can occur. Computers can facilitate this type of environment. The computer can act as a tool to increase verbal exchange.

In a study conducted by Liaw (1997), computer books were used to investigate whether computers increase verbal interaction between students. These computer books are interactive stories that appear on the computer screen as an actual book with text and illustrations. There are also a variety of interactive choices students can use to read the story, including: real voices that read aloud, music, and sound effects. The story is also highlighted so readers can follow along with the text.

This study was conducted by videotaping student interactions while using the computer books. Students were arranged in groups of three to read the stories. Their types of speech used with each other were analyzed. Even though the children had limited English language proficiency, they engaged in various modes of language functions to accomplish their reading of the computer books (Liaw, 1997). They made many commands to each other. They also shared opinions and made suggestions. They tended to ask a lot of questions of their partners and were given responses.

The quality of talk was also analyzed by Liaw (1997). The amount of computer related talk and story related talk was measured.

Initially, there was a lot of computer related talk, but as the students became more familiar with the format of the stories and software, their talk became story related in subsequent sessions. Overall, the study concluded that verbal interaction and the use of a variety of language functions by English language learners can be facilitated by the use of the computer. The group's computer book reading environment fostered language development by providing an opportunity for verbal interaction. The use of the computer can be a useful supplement to the traditional curriculum of the ELL classroom by promoting verbal communication and the acquisition of English.

Vocabulary Development

One way to use computers for English Language Learners is to teach vocabulary. Kang and Dennis (1995) write, "Any attempt to treat vocabulary learning as learning of isolated facts certainly will not promote real vocabulary knowledge". Students need to learn vocabulary in context and with visual clues to help them understand. Computers can provide this rich, contextual environment. The computer also allows students to become active learners in a one-on-one environment. Computers can incorporate various learning strategies as well as accommodate a variety of learning styles.

In a study done by Kang and Dennis (1995), an investigation was conducted to determine whether or not the use of computers facilitates the vocabulary development of beginning English language learners. The study was conducted in Seoul, South Korea. The fifth grade students learning English were assigned to three different groups. The type of studies done by the three groups were: definitions, picture, and context. The group studying definitions was given the English word with the definition written in Korean. This group relied mainly on rote memorization. The group studying pictures were given the definition as well as a picture. The third group was given a situational context employing the English word first and then given the definition and picture.

Initially, the picture and definition groups did much better than the context group. However, after a few sessions, the context group's scores surpassed those of the other two groups. There was also a test given at the end of the treatment sessions to test for retention. For this test, the context group scored significantly higher than the other two groups. Kang and Dennis (1995) concluded, "the Context group subjects needed a period of time to get used to their instructional treatment before they could take advantage of this more engaging type of instructional approach". In the end, the contextual approach proved to be much more effective in promoting long-term recall of vocabulary. This learning process was made possible and more effective by the use of computers.

Reading

There are several ways in which technology can be used to improve reading ability. Most simple reading texts are also very primary in content. Older children may consider themselves too old to be reading such primary content books. Computers, however can increase the interest level for older students while keeping the text simple and easy to read. Another benefit of using computers for reading instruction is that the computer offers immediate feedback on performance. They also can provide added practice when necessary. According to Case and Truscott (1999), students have been able to improve their sight word vocabulary, fluency, and comprehension. Computer based reading instruction also allows for "increased interaction with texts, attention to individual needs, and increased independence through an ability to read texts they would not otherwise be able to read" (Case & Truscott, 1999).

Technology can also be used to improve parent involvement in their child's education while improving the parents' literacy as well. Landerholm, Karr, and Munshi (2000) created a three year program in Chicago with four specific goals to help parents: become involved in the school community and become comfortable on campus, enjoy reading and writing alone and with their children, understand science and computer technology, and improve their own literacy. This project was as much for the parents as for the child. The computers were the drawing factor for the parents to become involved in the program, though they were not used initially. The program began by using other forms of technology such as photographs. Photos were taken at field trips and special activities. Parents and children then created a type of memory book using the photos and written text about the pictures. This eventually evolved into scanning the photos and typing the text onto the pages.

In the Landerholm, Karr, and Mushi project, students also created book reports with their parents on the computer. Current software allows for much creativity, such as including sounds, video, clip art and photos into the text of the report. Doing the book reports encouraged the children to read more and more books. One child in the program read nearly 300 books in one year (Landerholm, et al. 2000).

Computer software and games provide many fun opportunities for students to practice literacy skills. There are numerous software

packages for improving spelling, phonics skills, grammar and sight word vocabulary. When English Language Learners are learning their second language, any and all language experiences are valuable to assist in reading ability.

Writing

As demonstrated, computers and software can help English language learners develop vocabulary skills and knowledge. Computers can also help ELL students develop their writing skills. Lewis (1997) recommends that composition for beginning learners should be a guided activity so students do not become frustrated. Writing paragraphs in a language that is still somewhat unfamiliar to students can be difficult. When using a computer, however, the use of graphics can make this much more enjoyable. Using clip art can also help students to convey their thoughts more clearly.

Mireia Trenchs (1996) performed a case study of three students learning Spanish as their second language. The study was done in New York City. Trenchs used electronic mail as a medium of instruction to improve writing in the students' second language, in this case, Spanish. Students voluntarily engaged in e-mail transmissions with Trenchs. They were not graded on their messages, nor was their participation mandatory at all. The goal was to allow students to improve their writing skills in a way that is communicative and a part of their everyday lives.

The first case study was very interesting. Trenchs (1996) described many aspects of electronic mail that Latoya used to help her in her writing. Latoya often kept the e-mail from Trenchs on the screen as she answered. This allowed her to use the vocabulary from the questions posed by Trenchs to answer the questions as well. She also would scroll up and down between the messages when she was finished in order to check her work. The messages from Trenchs served as guidelines for organizing Latoya's writing. Latoya also used a combination of written information sources. She would combine the phrases from the e-mails from Trenchs with the Spanish she had learned in class and the information found in the dictionary to write her e-mail messages and responses. One other advantage of electronic mail that Latoya employed was saved mail. She would sometimes respond to old mail a second time when there were no new messages from Trenchs.

In the study by Trenchs (1996), the second case study of Malika was very different than the first. Malika enjoyed using technology, however, it was relatively new for her. Malika wanted very much to communicate in her second language, however, she was hampered by her own knowledge of her language limitations. She also relied heavily on written resources, such as a dictionary. Malika was excited about writing, and was learning quickly to speak in her second language, however, she was looking up every word she wrote in the dictionary. When using the dictionary, she would not retain the vocabulary she looked up. After she typed it, she would forget what it said. Malika's writing skills using electronic mail showed that students need adequate instruction in writing before using computers as a supplement to the curriculum. Often, the student needs to feel confident in their new language before putting it into print.

Trenchs (1996) third case study was an average student in the Spanish class named Shanaya. She was an active participant in class and took every opportunity to practice speaking Spanish outside of class, but she wrote little in Spanish. When using e-mail, Shanaya chose to read the incoming message and use her dictionary as well as pencil and paper before responding. She preferred to write first before typing. She also used many phrases in her e-mail that she had learned in class previously. Both of these strategies were excellent for writing in a second language.

Trenchs (1996) ultimately discovered that using electronic mail as a supplement to the classroom curriculum can be effective. The students voluntarily used the e-mail. They were self-motivated to use their new language in a new and creative way for them. One of the benefits of using electronic mail included the scrolling feature that allowed the students to view the incoming message and use its structure as a model for creating a response. The scrolling feature also allowed students to easily edit and revise. The major benefit of using e-mail as a language learning activity is the fact that students are using meaningful language and authentic text.

According to Lewis (1997), grammar skills can also be demonstrated and reinforced using computers. The teacher can direct students to somehow highlight a specific part of speech (e.g. nouns) throughout their writing. To highlight, students have a lot of choices, such as underlining, italicizing, or changing the font size, color or type. Using a computer as a medium for studying grammar is much more motivating for a student as opposed to writing with a pencil.

Conclusion

Computer-assisted instruction has been shown in a range of studies to facilitate learning in a variety of ways. Computers can be used to aide in teaching English Language Learners in core academic subjects, such as reading and writing. Computers can aide in vocabulary development as well as verbal language development. Ultimately, however, it is important to recognize that computers are not a substitute for effective teaching. Computers are a tool--they are simply one type of supplement to the regular curriculum in teaching English Language Learners as they develop their English language skills.

References

- Case, C. & Truscott, D. (1999). The lure of bells and whistles: Choosing the best software to support reading instruction. *Reading and Writing Quarterly: Oversoming Learning Difficulties*, 15 (4), 361-369.
- Cordova, D. & Lepper, M. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology*, 88 (4), 715-730.
- Kang, S.H. & Dennis, J.R. (1995). The effects of computer-enhanced vocabulary lessons on achievement of ESL grade school children. *Computers in the Schools*, 11 (3), 25-35.
- Landerholm, E.; Karr, J. & Mushi, S. (2000). A Collaborative Approach to Family Literacy Evaluation Strategies. *Early Child Development and Care*, 162, 65-79.
- Lewis, P. (1997). Using productivity software for beginning language learning--Part 1. The word processor. *Learning and Leading with Technology*, 24 (8), 14-17.
- Liaw, M.L. (1997). An analysis of ESL children's verbal interaction during computer book reading. *Computers in the Schools*, 13 (3/4), 55-73.
- Trenchs, M. (1996). Writing strategies in a second language: Three case studies of learners using electronic mail. *The Canadian Modern Language Review*, 52 (3), 464-497.

Appendix A

There are many valuable software programs available for use with English Language Learners. Most software emphasizes the language arts. Below is a list of helpful websites for research of appropriate software for ELL students.

- http://iteslj.org/links/TESL/Commercial_Sites/Software/
- <http://eslcafe.com/search/Software/>
- <http://www.polk.k12.nc.us/esl/software.htm>

The Internet TESL Journal, Vol. IX, No. 3, March 2003

<http://iteslj.org/>

<http://iteslj.org/Articles/Ybarra-Technology.html>