

Using Technology To Help English Language Students Develop Language Skills:

A Home and School Connection

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Helping students to be literate is a high priority. Though this area is one of our greatest educational priorities, it is also one of our greatest challenges. As classroom environments continue to change, teachers face the challenges of a large population who do not speak English and who have high transient rates. For this large population, becoming proficient in English is a very difficult transition; one that is often frustrating and even painful.

Students learning a new language need a great deal of language support. Those who teach students learning English as their second language know that any language support is crucial for students' language acquisition. Therefore, English Language (EL) students need a variety of language experiences. They need opportunities to hear, write, speak, and read English.

Technology, especially computers, can play an integral part in providing EL students with valuable language experiences as they learn a new language. Computers can be used to help provide additional language learning opportunities for EL students that take place beyond normal classroom instruction. Combining these opportunities with activities that can be done at home with family members provides EL students with a rich language learning experience.

This article focuses on how computer-assisted instruction (CAI) can be a supplemental teaching tool for teaching English Language learners, and on how these activities can be extended at home to produce a greater school-home relationship. Provided in this article are recommendations that educators can use with their EL students and families.

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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 comments 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 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 described, computers and software can help English Language students develop vocabulary skills and knowledge. Computers can also help EL 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 a student, 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; she was, however, 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

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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.

A Home Connection

The goal of using computer-aided instruction with EL students is to provide them with extra opportunities to learn and practice English. The use of CAI can be a valuable learning tool; however, learning a language must be done contextually. English Language students must be provided with opportunities to practice the language in real-world contexts. Encouraging EL students to practice outside of school, especially at home, is an extremely important element in helping EL students become fluent.

A home-school connection starts with encouraging and securing parent involvement. This can often be difficult especially with parents who are also not native English speakers. Included in Table 1 are suggestions for encouraging parent involvement with school activities and with involvement with helping their child with language development.

Activities To Encourage Parent Involvement with School Activities

◆ Set up a parent center at school that is stocked with resources that help parents. The resources should be available for parents to borrow.

◆ Find out why parents indicate they do not get involved. Typically it is because they don't have time, they don't know how to get involved, they don't understand the importance of being involved, and/or they don't speak English.

◆ Stress that communication between schools and parents is a two-way venture. Communication to school from parents is

important. In communicating with parents, realize that communication is not always possible through the use of the telephone. Although becoming less frequent, some student homes may not be equipped with a telephone.

◆ Go out into the community to meet and greet parents. Have a school bus filled with staff and teachers go into the school neighborhood to introduce themselves and to talk with parents about how they can become involved in the school.

◆ Organize a *Curriculum Fair* to give parents a better understanding the curriculum that is being taught, and how they can become involved.

◆ Organize and implement a *Family Reading Night* to inform parents about the reading curriculum through games and activities.

◆ Offer parent workshops on various topics dealing with language development and study skills. Vary the times and days that workshops are offered.

◆ Avoid making judgments about the apparent lack of interest of parents in their child's education. Until you have lived a day in their life, it is difficult to understand what they are going through. What you may think is apathy may be something quite different.

◆ Ask parents to be involved. This is one of the most effective ways to get parent involvement. Be ready to specify what they can do to be involved.

Activities To Encourage Parent Involvement with Language Development

◆ Assign homework that requires interacting with someone at home.

◆ Provide parents with specific suggestions about how they can help their children develop language skills. For example, simple suggestions like reading aloud to your child each night can be helpful. Provide a short list of suggestions that parents can quickly implement.

◆ Provide training for parents on how to help their child develop language skills. Be sensitive to issues of day of week and the time when the training is offered. Additionally, understand that some parents will also have issues with child care and transportation that inhibit their ability to participate.

◆ Along with the previous suggestion, provide instructional materials that can be used at home. Instructions should be written in the language that is spoken at home, if it is not English. A parent who cannot read the instructions will not be able to help their child.

◆ Invite parents into the classroom to see what is going on. Seeing how an instructor provides instruction can help a parent gain strategies for working with their child.

◆ Provide open computer lab times at the school where parents and the child can work together on language development using CAI.

◆ Encourage parents to participate in language learning, especially if they are

Table 1

There are a variety of useful Web sites that provide information about literacy and parent involvement in the process. The following are a great place to start.

- <http://www.cal.org/>
- <http://www.uc.edu/njrp/>
- <http://www.parent-institute.com/>

Table 2

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

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

not fluent in English. Demonstrating that learning English is important can help provide motivation to a child.

◆ Provide a list of resources that parents can use to help their child with language development. An example is directions and hours to the local library. (Wherry, 2004)

Personal Reflections: Creating the Home-School Connection

As a classroom teacher and now a teacher educator, I have been fortunate enough to work in schools that have provided me with opportunities to 'practice what I preach.' I have been involved with schools that have had sufficient technology resources and significant populations of EL students.

I have found, as the research cited in this article indicated, that EL students do benefit in developing language skills from their involvement with CAI. I have learned, however, that computer-assisted instruction is not the entire solution. I have found that a holistic approach is necessary. In addition to regular classroom language instruction and CAI, language development must be reinforced outside of school—particularly at home. Therefore, involving parents is a crucial element in a student's ability to become fluent in English.

Making a home-school connection for EL students is not always an easy task. English language students are part of EL families with parents that often speak less English than their child and who face other issues (e.g., lack of transportation, working multiple jobs). This realization, which seems obvious to me now and probably obvious to others, was not something that came to me immediately as a classroom teacher. I mistook a parent's lack of involvement as apathy rather than seeing it as something more complex.

I believe that parents must be involved in a child's language development if that child is to be fluent. There are many obstacles to overcome, especially with EL families, to make this happen. I have successfully used the strategies I provided in this article to encourage parent involvement. It has taken a great deal of trial and error to find solutions that work, but the response from parents I have seen has been tremendous. EL parents want to be involved, but there are often tremendous obstacles that prevent them from being involved. It is our job as teachers to help EL parents overcome these as best we can. It is also my job as a teacher educator to assist my pre-service teachers as they learn strategies to effectively develop home-school connections.

Summary

Computer-assisted instruction has been shown in a range of studies to facilitate learning in various ways. Computers can be used to aide in teaching English Language students in core academic subjects, such as reading and writing. Computers can also 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 students as they develop language skills. It is important that EL students are given additional opportunities to extend their English language skills by providing activities that can be used at home.

Home involvement is a key element in extending what is done at school. Computer-aided instruction, used in conjunction with literacy activities that involve parents, provide a holistic approach for EL students to develop language. Understanding how to develop a positive home-school

relationship will help teachers provide this holistic approach to language development for their students.

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