Rationale

The use of computers in North American elementary schools seems to be increasing every day. Students as well as teachers are using technology for language acquisition, assessment, and scientific discovery. By promoting computers to international students and their parents they will not end up on the wrong side of the digital divide.

Taylor and others say (p. 575), “A very small percentage of the world’s population (5% by a 1999 estimate) has access to the Internet, but for English language teaching the figures of greater interest are those indicating the level of computer access among English language learners globally.” A study showed that in 1993 only 42% of Japanese elementary students had access to a computer, but when the same study was done in 1996 it showed that about 89% have access to computers. Most of the students at the target elementary school did not have computers at home. Therefore they did not have access to the Internet, email, and other types of information at their fingertips. It was felt that by teaching children how to properly use the computer and the programs associated with them, they would be encouraged to continue using this type of technology when they are offered the opportunity.

The students participating in this project were all English Speakers of Other Languages (ESOL) students. Most of them had come to America with their families to make a better life for themselves. Many of them were part of the lower class and did not have the opportunities to use computers outside of the school setting. In their native countries they did not have opportunities to use computers at school or in their own houses because of the poverty surrounding them. A significant number came from single parent homes; Walling says (p. 7), “America serves as a haven for immigrants and refugees. The South, West, and Southwest long have been a destination for Spanish-speaking newcomers from Mexico, Puerto Rico, and Latin America.” By coming to America they have found many more opportunities to help themselves become more familiar with computers and to develop English proficiency.

Ramirez and Douglas (1989) say, “A successful educational program can best be realized when parents and school personnel cooperate with one another to provide children with a supportive educational environment.” As the researcher began the year teaching, he discovered that many of his students’ parents did not have computers at home. He had used email as a communication tool in previous classes and had many parents consistently send emails with questions, suggestions, and requests on their child’s progress. That year he had only one parent capable of using a computer as a tool between home and the classroom. A few of the parents that had come in for conferences
said that they only have access to a computer at work, and some of them didn’t ever get a chance to use a computer. This was viewed as an opportunity to encourage students to use the computer and then pass their skills on to their parents and guardians.

Literature Review

In an article written by Taylor, Jamison, and Eignor (2000) they describe a research project they developed using computers and second language learners to see how “familiar” they are with them. In their article they say, “Computer familiarity was defined as frequency of any kind of computer use, frequency of use of English word-processing programs, and frequency of use of the Internet.” (p. 575) Their participants were Test of English as Foreign Language (TOEFL) examinees. They say (p. 577 & 578), “Because the TOEFL is required for admissions to most graduate and undergraduate colleges and universities in North America and because most TOEFL examinees indicate that they are taking the test for college admission, this sample should provide insight into the computer sophistication and readiness of international students planning to attend North American colleges and universities.” The 191,493 participants of this study answered 23 questions pertaining to their familiarity of computers. After examining the responses to the questions it was found that the participants were increasing their “familiarity” of the computer with time by about 6-9%. The research was conducted over a 2-year timeframe. All groups of participants reported similar results. One of the groups (Japanese respondents) showed about a fifteen percent increase with their familiarity. Taylor, Jamison, and Eignor say (p. 583), “The results indicated increased use of computers, English word processing, and, most notably, the Internet in just over 1 ½ years.” These results were much different than a similar report done 10 years earlier by Hicks, which stated that 72% of international students had not ever used a computer. By 1997 that percentage was down to only 5.6%.

Another article by Christopher K. Howe examines two studies for addressing the educational needs of our fastest growing student population, Hispanic students. He says (p.42), “Compared to blacks or whites, Hispanics enter school later, leave school earlier, and are less likely to complete high school and enter or complete college. They remain the most undereducated major segment of the U.S. population.” In this article Howe gives advice, based on research, on ways that you can effectively reach out to educate the Hispanic community. He lists 6 tips for educators (p. 43-44):

1. Place value on the students’ languages and cultures.
2. Set high expectations for language-minority students.
3. Design staff development to help teachers and other staff serve language-minority students more effectively.
4. Design counseling programs that give special attention to language-minority students.
5. Encourage parents of language-minority students to become involved in their children’s education.
6. **Build a strong commitment among school staff members to empower language-minority students through education.**

Howe continues to say that the techniques used to educate Hispanics are currently not working and this is becoming more of a problem because of the rate in which Hispanics are coming to America. This fastest growing population is certainly not going to go away. Therefore, by reaching out to this group of people we will all benefit in some way.

David Ramirez and Denise Douglas wrote an article about successful parent involvement programs for language minority parents of elementary school through secondary school children. The article provides a rationale and discusses obstacles to language minority parent involvement. The discussion of this article is organized around 4 questions (p. i and ii):

1. Why should language minority parents be involved in schools?
2. How effective are parent involvement programs for language-minority parents?
3. In what ways can language minority parents be involved in schools?
4. What are the basic components of a successful parent involvement program for language minority parents?"

Ramirez and Douglas (1989) say there are two basic ways that home and school can form successful partnerships. One way is for parents to become involved in the school as an aide, visitor, advisor, tutor, guest speaker, committee member, or any other capacity that can provide support to the school. Also, parents can participate at home in ways that support the school system. This will help place greater impact on student achievement. The involvement programs of language-minority parents are very wide. Many times parents are being involved without even knowing it. By attending school plays, helping their child with homework, socialization, discipline, and cultural transmission parents are continually helping their children whether it is in a native language or English. Some of the more visible ways that parents can help become involved with their child’s school is to form business partnerships, attend board meetings, and become part of a school decision making team. “Parents initiate very few activities although some organizations support parent initiative at the national and local level. There is a mistaken belief that because parents do not initiate, they are not involved,” says Ramirez and Douglas. Finally, in their article they describe a few basic components of a successful parent involvement program. Some of the characteristics of these programs include effective home-school communication, clear objectives, parent concerns and skills, all grade levels (although roles may differ by grade level), training parents as tutors, and training parents as partners in the academic and career guidance of their children. By including these things into the home-school partnership, communication will improve and so will student achievement.
Questions

1. Can individual or small group instruction encourage students’ ability to facilitate instruction to their parents?
2. Does parental support increase when students are the facilitators of instruction?
3. Does computer competency increase as students become familiar with computers and their applications?
4. Are students motivated to use computers, when given prior instruction how to use given applications and programs?

Importance

The researcher has tried to bridge the digital divide between these International Students living in America. Whitelaw-Hill (1995) says (p. 2), “Modern language teaching has benefited from all of the insights of technology and modern pedagogy; we’ve come a long way from the days of dry-as-dust language drills that were still prevalent in the early days of bilingual education.”

One major reason that this program was developed is because the researcher wanted to promote parental involvement. The parents of the students participating in this project were encouraged to visit the school computer lab and learn how to operate the same computers that their children are using. Since the families of these students did not have computers at home, some of their parents were unaware of the way their children were using computers at school. As these students get older they will increasingly need computer skills to get ready for middle school, high school, and college. Parental involvement usually decreases, as a child grows older, so that it is less in secondary schools than in elementary schools.

Some parents that are trying to become active participants in their child’s education are becoming frustrated, even angry, with schools that persist in being “the experts” who know what is best for their children. By completing this research project it is anticipated that parents will be demanding significant roles and to be fully engaged in their child’s education. The Ohio Department of Education (2002, p. 18) notes, “There are many reasons for developing school, family, and community partnerships. They can improve school programs and school climate, assist teachers, provide family services and support, increase parents’ skills, and connect families with others in the school and in the community.”

In the school that the researcher teaches, computer skills and technology are skills that many of the children are lacking. Although technology is not the only subject that students are falling behind in, it is a Virginia Standard of Learning that students must demonstrate basic competencies for.

Parents feel more enthusiastic about attending school events and helping with students’ learning objectives if they are presented in a way that is user friendly and easily accessible from both home and school. Fueyo (1997, p. 62) says, “As the number of language-minority children in our classrooms increases, all teachers need to take a more active role in educating these students.” It was
hoped that this project would both increase parental involvement and boost student achievement.

**Methodologies**

**Who**

This research project involved eleven boys and girls in fourth and fifth grade. The participants were purposely chosen from more than one grade level so that we would have a larger variety of ages. “Graded schools focus primarily on the model that teaching is transmitted to the learner, whereas multiage settings focus on the interactive nature of the teacher/student,” says Aina (2001, p. 219). The participants in this project came to America from another country. They represented students from 8 different countries, speaking 6 different languages. The population included 3 Hispanic students, 4 from the Middle East, 2 Asians, 1 Russian, and 1 student from Vietnam. Since these kids were not natives of America they had not always felt welcome in a new culture. By placing them in a group with students in similar situations they tended to feel a little more comfortable.

All of the students who answered questionnaires to participate in this project expressed some interest in being part of this research experiment. The children that were chosen all indicated that they only knew basic computer skills and that they needed direction in opening programs and getting started. None of the students had computers at home and all had very limited times that they are allowed access to a computer. They said that they did not feel comfortable using a computer unless under direct supervision. A few of the students said that they knew how to play games or use educational programs that did not involve the use of any peripherals other than the mouse. Also, the parents of these children had to sign and date the questionnaire and indicate whether or not they would be willing to attend the school with their child, to learn the same skills that their children had been taught.

**What**

The participants of this project were committed to learning how to use the basic computer applications included in Microsoft Office. The students created a final project using Microsoft Word, PowerPoint, and Excel. During group meetings the students would get directions on how to accomplish their tasks and then were given time to work independently at a computer.

When using Microsoft Word the students created a document showing their ability to use formatting features as well as importing images from other sources. The students began by making a personal mouse pad. The researcher took each child’s picture using the school’s digital camera. Then, the students imported the images and formatted them to fit on an iron-on transfer that is printed through an ink jet printer, and applied the images to a blank mouse pad.

Students were given bags of M & M’s one day and they were asked to record how many M & M’s they received of each color. The group then worked
with Microsoft Excel and recorded their findings. The students created color graphs representing each color of M & M’s they received. The participants were allowed to eat their candy after creating their graphs and print out a color, hard copy of their graphs.

During one of our meetings the students created a Microsoft PowerPoint presentation that represented them. Most of the presentations consisted of about 4 or 5 slides. Students put their name on the first slide with their teacher’s name and grade level. They then imported graphics of themselves, sports they enjoyed, animals of interest, and pictures obtained from the Internet. Students also used keyboarding skills to enter information and used animation tools provided with PowerPoint.

How

The researcher and participants met on Thursday afternoons from December through May. The meetings ranged from 30 to 60 minutes. The students were given permission from their classroom teachers to attend meetings. During the first meeting the students did not get onto the computers. Pictures were taken of everyone using a digital camera and the group talked about the projects that were going to be created. The students were given a chance to use computers in the school computer lab during all other meetings.

Conclusions

This research project has shown that by working with students in a small group to achieve better computer competencies will make them more enthusiastic about using technology and sharing it with their parents. All of the students who participated in this project felt much more comfortable and capable of using a computer on their free time. The students demonstrated that they were able to accomplish certain tasks using their classroom computers. Several of the students expressed interest in using a computer to assist with homework. The students said that if they had access to a computer every evening it would make homework more enjoyable and easier to accomplish. “Research has shown that attitudes toward what children study in school may very well be more crucial to their futures than the knowledge accumulated,” says Wolpert (2001).

Because of limited time the students were only allowed to invite their parents into the lab one time. Seventy percent of the students’ parents showed up to work with their child on the computer. The parents seemed a little intimidated when they entered the lab, but seemed to loosen up when they sat down with the students. Some of the parents who attended knew enough of the English language that their instruction was given to them in English, others felt more comfortable using their native language, so the students facilitated the instruction in that language. Christopher Howe (1994) tells about a research project that he conducted with Hispanic students. He says to, “Place value on the students’ languages and cultures. Teachers and staff could attempt to gain a rudimentary command of the Spanish language. In addition, they should not punish students for using their native language in contexts where English is not expressly called for.” (p. 43)
positive feedback to the parents of these children helped present a more inviting feeling towards the school. Often the only time that parents hear from a child’s teacher is if there is a problem or concern at school. Parents like to know that their actions are getting good results. By sending home hard copies of the projects that the children created, parents noticed that their efforts were making a difference.

References