Inspiring
Students with Peer Tutoring

Recently I led an after-school club called the Tech Club that built upon a peer tutoring model. I trained student leaders, or the "Tech Kids," to facilitate technology how-to sessions in their third grade classrooms. After learning technology basics, this core group of students visited different third grade classrooms to teach their peers this magic.

These participants were selected by their teachers based on certain criteria that the other third grade teachers on my team and I had determined. The criteria was not the traditional, straight A's, outstanding behaviors, or extreme

knowledge about technology. Instead, we sought students who had great potential to be leaders among their peers but had not yet found their niche. Three groups of students came to mind:

1. Some of the students had behavioral issues that deterred them from traditional positions of leadership. We wanted to find at least one positive outlet for these students.
2. Others had the leadership potential but were extremely shy and needed a way to discover the leadership qualities they possessed.

By Brandy Smith

At-risk students gain confidence and leadership skills when thrust into the role of technology tutors to their classmates.

3. A few were "tweeners"—they had great potential, but due to the circumstances of the school (large amounts of attention going to the students who needed it the most) they never got the acknowledgement they deserved.

Benefits

Peer tutoring is essentially peers teaching each other. Many teachers already incorporate this idea into their classrooms in other curricular areas and appreciate the benefits that come from this type of teaching. Teachers can implement peer tutoring by teaching a small group of students a subject, or using a group that already understands the subject area, who in turn will be able to teach that concept to their peers.

One benefit of this strategy, nurturing social interaction between peers as they work toward a common goal, was definitely shown through this experience. Students worked together, rather than in isolation, while learning technology skills. The experience allowed students who were not class leaders an opportunity to build their social skills.

When most schools do not have enough computers to allow adequate time in the scheduled computer lab, peer tutoring can help alleviate this problem. Tech Kids can work with their peers on the computers at times when there are only one or two computers available in a lab setting. Having flexibility with peer tutoring does not require the entire class to wait until the classroom teacher provides the integration instruction.

An additional benefit of peer tutoring is that it frees the teacher to focus on curricular areas. If other students are able to assist their peers with technology issues, it means the teacher can focus on the learning.

Training Peer Tutors

At this point you may be thinking, "Peer tutoring sounds like a great idea, but how do I train the students who will do the tutoring?" I found the answer in the Tech Club. The intent was for the students to become excited and knowledgeable so they could assist their teachers in feeling comfortable when using technology as a tool in their classrooms.

It is important to understand the school setting of this club to better appreciate its impact. Our school is in a Midwestern, urban location. The demographics of the area generate a school setting of diversity—approximately half African-American and half Caucasian. The school is set in one of the lower socioeconomic areas of the state with approximately 75% of its students receiving free or reduced lunches. The Tech Club served three classrooms with approximately 60 students, including 10 special needs students. Ten students participated in the after-school program for two hours a week.

As one of the lead teacher facilitators who originated the Tech Club with grant funding, I continued the club after those monies ran out because of my enthusiasm for the program's success and belief in the need to facilitate further technology integration in the school's curriculum. The technology objectives for the club were directed by the district's technology integration plan and dictated by my knowledge of the appropriate integration skills for the curricular area of study. Because I'd collaborated with the building principal and district technology coordinator to write the district technology integration plan, administrative support for the project was strong. The Tech Club was also aligned with the district technology plan.

The club ran for one hour after school on Tuesdays and Thursdays because students could take advantage of transportation from other after-school programs. Twenty wireless laptop computers housed in a cart, previously purchased through the original U.S. Department of Education grant that started the club, were used for instruction.

I would select an objective for the evening (e.g., how to do a basic Internet search) and teach that objective to the club participants. Once I taught the skill, the Tech Kids would be required to demonstrate it independently and then practice by teaching the skill to a small group of Tech Kids that evening. Great student empowerment came from these decision-making procedures.

Once I felt confident in the students' ability to teach a skill, I'd arrange with classroom teachers to push the cart of portable computers into the classroom with the Tech Kids. They would begin with a whole class demonstration. The demonstration would be short in nature, followed by breaking students into small groups (one to three students) to give the class hands-on time with the computers. I monitored these demonstrations by attending the sessions when possible. If I was not able to observe the sessions, I'd get feedback from the Tech Kids and classroom teacher to see if additional tutoring sessions were needed.
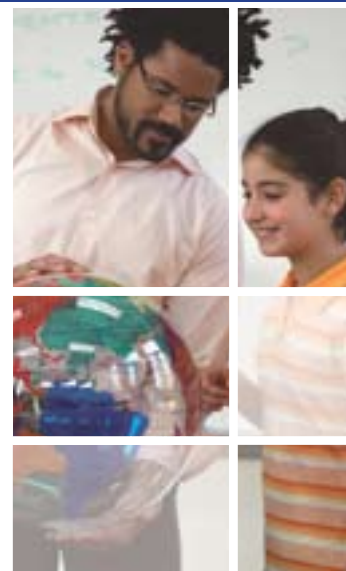
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> *Two wonderful things came from the club: empowered, happy students and empowered, happy teachers.*

The club required a commitment from the classroom teachers in addition to the students. The teachers needed to be willing to find time slots in their schedules each week to allow the club to teach the technology skills in their classrooms. Furthermore, the teachers needed to open their curricula and allow technology integration to transpire. For example, when the students were studying habitats in social studies, it seemed natural to teach ways in which technology tools could enhance research on habitats. That research required teaching basic searching techniques, as well as suggestions for deciphering important information.

Results

Two wonderful things came from the club: empowered, happy students and empowered, happy teachers. This model demonstrated the great impact children could have in teaching their peers. What happened in those classrooms has positive reinforcement for the use of peer tutoring and technology integration.

Prior to this experience, few students could use basic computer terminology, successfully turn on a computer, operate basic software, or perform Internet searches. Analysis revealed the majority of the students achieved all of these district standards. Even greater evidence demonstrates improvement in all third grade students' perceptions of themselves as technology learners. Before the start of the project, only a few students thought they were knowledgeable about technology. When asked, all students felt they were technologically literate.

The social aspects of the club were amazing. As the club progressed, the original 10 Tech Kids were seen as leaders among their peers. For these children, this was a fantastic feeling. Many of them had never been seen in a leadership role. Remember that one of the original criteria was that the students selected for the club did not have other extra-curricular outlets. For some of these students the after-school club motivated them to control their behaviors so they could participate. The Tech Kids, in addition to their peers, became more willing to teach others about technology and work together to learn about technology as a result of this leadership project. The students felt they had learned from each other and became better technology users in the process.

The club definitely allowed more one-on-one computer time for each third grade student. There was time for hands-on computer use with a peer tutor to help with the new computer skill. Students attained the computer objectives from their peers. The Tech Kids could also do one-on-one pull-out tutorials with students who may have been absent on the day the computer lesson was taught or with students who wanted to use the computers for research purposes.

Finally, the model showed how the "students as teachers" motivated a slightly older age group of learners—the classroom teachers. This project demonstrated how the students actually helped the teachers become more confident in their technological abilities and willingness to use technology in the classrooms. The results of this activity also illustrated that the students motivated the teachers to want to help fellow educators learn more about technology. These ideas were realized due to an increase in the teachers' willingness to use the portable computer cart in their classrooms. The carts went from never being checked out to being used at least two to three times a week. The requests focused on using the technology for Internet searches for research projects and teaching the students more about computers—direct skills taught in the Tech Club.

This model saved teachers time because they were learning the technology skills with their students instead of taking inservice or their own after-school time. Teachers could focus on curriculum and let the Tech Kids deal with teaching the technology skills.

Conclusion

Properly integrating technology into daily curriculum is an ongoing quandary. Teacher frustration toward technology integration can be due to lack of time, knowledge, and computer shortages. The Tech Club model is a way of affecting the technology curriculum for an entire school, in addition to bridging other academic and social areas of school curriculums.

If a similar model was adopted by your school, limited amounts of staff could train students to become tutors of technology. The experiences demonstrated here show how successful this model can be in teaching effective technology curriculum and could be considered by others in the district as a model for infusing technology into the daily curriculum.

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