Student Support for 1:1 Initiatives

Adapted from Success and Student Ownership by Sylvia Martinez, M.A.



Generation YES Youth and Educators Succeeding

Generation YES students provide technical support, peer mentoring, leadership and support for technology professional development in thousands of schools across the U.S. and around the world.

Schools around the world are looking to put the power of technology into student hands by providing mobile devices for every student. These initiatives seek to equip every student with the personal technology needed to learn and communicate in the 21st century. Empowering students to be leaders, and valued partners in a school 1:1 implementation can lead to:

- Increased classroom technology integration
- Greater support for classroom teachers using new technology in lessons
- Greater student understanding and support for 1:1 program goals
- Greater parent understanding and support for 1:1 program goals
- Student empowerment, leadership, and ownership

Research shows that these programs can be very effective, and yet place a burden on already overworked technology staff and teachers. Fortunately, there are research-based solutions to this challenge that have the added benefit of increasing support for teachers, empowering students, and teaching them 21st century skills.

Using this guide

This guide is intended to provide teachers, technology coordinators, technology support staff and administrators with practical tips on including students in every aspect of a school's 1:1 initiative, from planning to long term sustainability. In it you will find many proven ways that schools can tap into the power of students in the effort to integrate devices into a school.

"By listening to students' voices, educators can learn how schools and classrooms can be more relevant to students' lives."

Dennis Harper



Generation

Why Include Students in 1:1 Initiatives?

Research and Common Sense

It's about change, not technology

In any new 1:1 program, hardware purchasing decisions often consume a lot of planning time. However, most 1:1 programs are not about hardware. Most schools hope for changes in student achievement, teaching styles, learning opportunities, and much more. These changes cannot be purchased, but must be nurtured with strong leadership and vision.

Include students from the start

Schools provide a powerful context for youth to become engaged in meaningful and relevant decision-making. To

be most effective, however, Calvert⁴ maintains that they also must be infused into ongoing planning and implementation. Youth can work with adults in partnerships that benefit both, and share roles as learners and mentors. When this equitable collaboration occurs, youth bring a sense of mission that positively affects everyone involved, both youth and adults.

There is evidence from many diverse schools that students can participate meaningfully as agents of positive change at both the classroom and school levels. Calvert maintains that this fits the current trend in educational research focusing on school climate, social conditions, and school culture. These are important factors for positive student learning environments and good working conditions for teachers. These trends also

support research from educational psychology⁵ that increasing student autonomy, membership, and agency leads to higher engagement and academic achievement. Planning and implementing a 1:1 program brings fresh opportunities to reinvent the learning community and refresh school policies. Including students in this challenge can result in benefits for all.

Successful change requires ownership

This guide is intended to provide teachers, technology coordinators, technology support staff and administrators with practical tips on including students in every aspect of a school's 1:1 initiative, from planning to long term sustainability. In it you will find many proven ways that schools can tap into the power of students in the effort to integrate devices into a school.

For humans involved in any change process, having control and choices are imperative for a successful transition. Yet rarely are students informed of these 1:1 initiatives or asked to help. Students are viewed as the objects of change, rather than the agents of change. Even professional development for teachers related to devices tends to focus on the logistics of using devices and learning new features. This leaves the most important and most difficult changes to chance, such as expectations that learning will become more studentcentered, teaching will be more collaborative and projectbased, and students will become more self-directed learners. Both teachers and students need to be included in all aspects of the planning and implementation of a program that is expected to have such a profound impact on teaching and learning. The importance of meeting basic human needs for control, competence, and belonging is confirmed by research on motivation,

learning, and development¹.

Research also reveals another payoff by reducing feelings of alienation that commonly occur under conditions that do not allow student choice, do not respect students' feelings or interests, and do not

consider students' perspectives.²

McCombs³ states, "...many researchers now argue that it is amazing and, for some, unconscionable that the primary persons served by the educational system are rarely if ever asked how they think the system should be designed and implemented."



Students as evangelists and allies

Students not only have the knowledge and position to shape what counts in education, but they also can help change power dynamics and create new forums for

change⁶. When the 1:1 initiative becomes something that students understand and can speak passionately about, they will!

Students attitudes towards the devices will influence their peers, parents, and the community at large. By including students as a primary audience for news about the planning process and how they will benefit, they can become evangelists for the program. Parents who are being asked to pay for devices, either directly or through taxes, need to know that these computers aren't just some high-tech whim. Hearing about the expected changes from their own children can convince parents that computers are not just for chatting and games, but a vital part of 21st century education.



Net generation

Students are part of a digital generation -- they have grown up with computers and technology in their lives and need to be prepared for a digital world. However, schools are often not meeting students needs when it comes to use of technology.⁷

Students are asking their schools to provide more opportunities to use technology to learn, and their voices need to be heard. In turn, adults need to teach appropriate use of these new tools. By asking students to participate in meaningful dialog about technology use, we not only gain their insight and experience, but we show students how their education is relevant for the world today.

21st century skills

Students in today's schools enter a different world than that of their parents. "21st century skills" are skills beyond traditional core subject areas including:

- Learning and thinking skills such as problem solving, creativity, and collaboration
- · Civic, cultural and global awareness
- · Life skills such as ethics and leadership
- Technology, information and media literacy

By participating in a 1:1 implementation, students learn skills that will last a lifetime. Technology by its nature tends to include problems that don't have answers in the back of the book. Learning to solve authentic problems when people are really depending on you is a true 21st century skill.

Back in the classroom, this experience can empower students to reach beyond the walls of their school and think beyond the next test. Reinforcing the belief that their voice and their actions are important, necessary, and valued creates students who will go beyond a class assignment and become empowered, global citizens of the 21st century.

Long-term student involvement

Current research increasingly supports the educational and social benefits of not only listening to youth, but also engaging them in authentic adult partnerships that address key issues of relevance to their lives such as education.

This guide offers a number of ideas to involve students in a 1:1 program. The goal is not that a school should attempt all of them, but should pick the ideas that make the most sense. For some schools, implementing a student tech crew will be the right answer. Another school may find that partnering teachers and students on classroom projects that increase device use is more effective. Explore the successful student support of 1:1 programs in this guide and then design a program that best satisfies the needs of your school.

Whatever path you choose, success in a student tech team initiative will hinge on creating a long-term, sustainable vision that provides benefits to both students and staff.



1 Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), Nebraska symposium on motivation. Vol. 38. Perspectives on motivation. Lincoln, NE: University of Nebraska Press.

2 (McCombs, B. L., & Whisler, J. S. (1997). The learnercentered classroom and school: Strategies for increasing student motivation and achievement. San Francisco: Jossey-Bass.

3 McCombs, B. L. (2003), "A Framework for the Redesign of K-12 Education in the Context of Current Educational Reform," The Ohio State University, College of Education, Gale Group. 4 Calvert, M. (2002, April). Raising voices in school: The impact of young decisionmakers on schools and youth organizations. Paper presented at the annual meeting of the American Educational Research Association, New Orleans. 5 Larson, R. W. (2000). Toward a psychology of positive youth development. American Psychologist, 55(1), 170-183.

6 Cook-Sather, A. (2002). Authorizing students' perspectives: Toward trust, dialogue, and change in education. Educational Researcher, 31(4), 3-14.

7 Pew Internet & American Life Project (2002). The Digital Disconnect: The widening gap between Internet-savvy students and their schools. American Institutes for Research



Preparing for Student Involvement

Including all Stakeholders

Students as stakeholders

Planning a 1:1 implementation often involves months or even years of planning. Stakeholder groups are convened, committees are formed, and meetings held to discuss the initiative. Yet the most important stakeholder group is often not included. Students are 92% of the population of most schools. Leaving this stakeholder group out of the planning and implementation process means that their voices will not be heard, their potential contributions will be lost, and they will not have full ownership of the program once it is a reality.

Laying the groundwork for student involvement

There are two major ways that students can participate in a 1:1 implementation.

- Committees. These could be technology planning committees, school site councils, technology security review committees, or peer review committees.
- Day to day activities related to device support. This may be traditional tech support, instructional support, or helping new users learn about their devices.

However, simply asking students to show up is not enough. Although there may be a rare student who knows how to participate in the often boring process of committee work, many students are not ready for this commitment. However, with focused adult guidance, students of all sorts can successfully participate with adults on committees. Without guidance, most students will find the process to be slow and painful, and will likely drop out.

Allowing this to happen simply reinforces the image that youth are disengaged and cannot be trusted with responsibility and big decisions.

Prepare and support students for committee work by meeting with them regularly to talk about progress and get feedback. Roleplaying can be an effective way to work out the unwritten rules of behavior before meetings. Have students practice collaboration activities such as brainstorming and using positive consensus language. It can also be useful to have an adult liaison who is NOT on the committee teach students how to navigate this new experience.

Many adults will claim that including students is too time consuming and risky to consider. They will cite logistics concerns, privacy, lack of maturity, lack of knowledge and other factors.

However, there will be necessary accommodations made for all kinds of adult stakeholders. They may or may not know anything about technology. They will have jobs and other commitments, and some will not have been in a classroom for years, if not decades. Surely these accommodations are not any greater than making it possible for students to participate in the process.

Committee work

There are numerous benefits to including students on committees dealing with your 1:1 implementation. Student point of view

- Technology expertise
- Time and anthusiasm fr
- Time and enthusiasm for research into technology

Internet safety and AUPs

School acceptable use policies (AUPs) should be reviewed before a 1:1 implementation. Including students in the process can be very helpful. Not only can students bring a new point of view to the conversation, but the participating students will be better able to articulate the new rules to their peers.

Security

Every school doing a 1:1 program will have new security issues to deal with. If you are planning to have students help with teacher support or do tech support, these plans should be addressed early.

One solution may be to offer trained students an access level between normal student and teacher levels. As students show their responsibility, you can gradually increase their access. Reward excellent work and good



behavior with increased responsibility and increased leadership opportunities.

For the student's sake, do not give students, even trained students access they don't need. There is no reason to put students into a position where they will become suspects if something goes wrong.



Student support for device rollout

Do it right from the start

Considerations

As you get closer to the implementation stage of your 1:1 program, consider what kinds of student involvement will work in your school. The transition from planning to implementation is a crucial stage for any 1:1 program. If students have been involved in the planning stages, or if you already have a student tech team, these students can form the core of a student device support team.

Devices will suddenly increase the amount of hardware and software that will need support. Yet response times need to be reduced to ensure teachers feel fully comfortable counting on the technology. In addition, the support needed for instructional integration will increase. These new support needs can overwhelm even the most prepared tech support and instructional technology staff. Adding students and preparing them to take an important role in the 1:1 program can increase response time for teacher and student issues, and also free up professional staff for bigger problems.

Students can provide invaluable assistance at this stage. They can participate in the logistics of preparing new devices for distribution, train teachers, students and staff, support new users, assist with parent workshops, and much more.



Preparation

Your 1:1 program rollout is key to setting the tone of your program. With extra help from students, you can make the logistics smoother and decrease new user anxiety. You also send a clear message that devices are studentowned and student managed. Self-reliance for all students will be enhanced by the example your student team sets. Prepare for this by assembling a student team ahead of time, training them on the new hardware and software, and getting to know them. Teach your student tech team not just about the hardware, but your expectations for student use and policies. Once the rollout day comes, you will have a team you know and trust to help.

Setup and rollout

Bring students in to help with the device delivery, unboxing, and initial setup. These students should be trained, of course, and can become the core of your student tech team once school starts.

- When devices are first unboxed, there are many tasks that students can help with, including:
- Tagging and inventory cataloging
- Install or update OS and other software
- Configure for the school's email, network, printers, and Internet access

Issues to consider:

- Will student help be a one-time thing or the core of a ongoing student tech team?
- The better you know your students, the easier it will be to manage them. Trust and responsibility go hand in hand. You will need time before student helpers interact with real users, so start with a small group of students, assign small jobs and monitor their work closely.
- Will these student leaders need special passwords or administrative privileges to help with the rollout?
- Don't be afraid of strong student opinions. Students who are very adept at technology may have strong opinions about the merits of different hardware, a favorite operating system, or could be strong proponents of a certain open source software. These student team members may be annoyingly argumentative just when you don't need it, but with time will be your best allies. Be honest with them about tradeoffs and include them in decision making. They will reward you with undying loyalty.

Setting up carts and recharging stations

When it comes time to distribute the devices, students can help with configuring new users, email and server settings, and other tasks. They can collect required paperwork and do instant tech support. In a large rollout, simply having extra hands and eyes will help things go smoothly.



Be aware that if you give students administrative access to do these jobs, you will need to decide if the student helpers will retain these privileges once school starts. If you decide to take privileges away, some students may feel that they earned your trust and changing their status is unfair. Even if you explain it to them, there may be unresolved feelings of confusion or resentment. Get these out in the open and be honest about it.

New user training

Students should be responsible for helping new users (both students and teachers) get their new mobile computing devices up and running. Get student and teacher input on what needs to be prepared for all your new users.

Students can:

- Prepare and deliver short introduction lessons for students (and teachers). These can be videotaped presentations or screencasts with voice over. Publish them on the school website or network.
- Allow students to choose training topics and prepare lessons. Students will listen to other students more than adults.
- Hold group practice sessions for sending and receiving email, groupware, or using classroom management systems.
- Create a website or wiki with information for new device users.
- Offer small classes or one-on-one help for anyone needing assistance. These can be informal lunchtime or after-school sessions in the library or tutoring center.
- Allow some students to be on-call during class time to attend classes where students are using devices for the first time.
- Have students present a "technology minute" at staff meetings. Let them create the content.
- Have students attend teacher professional development workshops. Students will be able to help teachers after the workshop is over. With some training, students will be able to help lead teacher workshops.

Parent workshops

Students can give workshops to parents about the new devices. Many device rollouts require parental involvement so that parents understand their role and responsibilities. Involving students in the parent presentations reinforces the message that the students are responsible for their own devices.

Parents will also see that students are interested in technology for academic uses, not just for music, games and socializing.

Internet safety and AUPs

Consider having students make presentations in classrooms about the new policies and hold discussions about policies and practices.

One way to involve students over the long-term is to have a student-run "court" that deals with minor student infractions of the rules. Allowing students to have a say in making and enforcing rules demonstrates that the school values students as full members of the learning community.

Initial in-class support

Teachers often cite lack of in-classroom support as a reason not to integrate technology into classroom lessons. Even with the best intentions, this happens in 1:1 schools as well. Teachers can't stop teaching to fix hardware and software issues, since even simple problems are multiplied by 20 or 30. Gradually, if problems are not solved, devices will end up being used less and less often. Students, however, can help prevent this problem.

Student Training Topics

Students can plan and deliver training on many topics that new device users will find invaluable. You can have students do some teacher training as well. Teachers will see that students have skills and passion about the devices and you may find that they actually respond better to students as technology mentors than traditional professional development.

- OS basics
- Printer setup and queues
- How to use shared server or cloud-based space
- How to manage student access to subscription services (video, library, hosted software)
- How to organize folders
- How to backup data
- Acceptable use policies and school rules
- Internet security
- Cyberbullying
- Netiquette
- Effective Internet searching and research
- Copyright and plagiarism
- Where to find school-appropriate images, music, and software
- How to use applications
- Self-help tech support tips

If you have a student tech team, teachers can request that one of your trained students be present when using new software in the classroom. Professional tech support staff can't afford to sit in a classroom in case something goes wrong, but a student can. Even if the student simply helps their peers with tips and hints as the teacher is managing the lesson, this extra support can ease teacher fears. Sometimes, just getting teachers past the first few weeks of classes without major problems can make all the difference.



High impact student support for devices

Leadership and Learning

Models for high impact student support

There are two basic models for student participation in 1:1 programs that really have the potential for changing the learning landscape.

- Students supporting teachers and peers with curriculum integration and training
- Student tech support teams

These models involve a long-term commitment to the student role, but have proven benefits. Most schools combine these models, or create pathways for students to progress through. Students can first work with teachers, and then after they prove their dedication and technical prowess, move on to technical support tasks. Either of these can be implemented to varying degrees in elementary, middle, and high school.

Student support for teachers

1:1 programs are much more than simply adding technology to the existing curriculum. As teachers learn to integrate the new technology and use more collaborative teaching techniques with students, they need time and support to evolve their curriculum to be more collaborative and student centered. Students can work one-on-one with teachers to help integrate technology into planned lessons. These projects could be very simple —or take weeks of work and collaboration. When the lesson is presented, the student could help provide floating classroom support, or even present the lesson themselves.

To support teachers effectively, students need to know more than just how the devices work, they also need collaboration and project-planing skills. It is also very helpful to teach students about lesson planning and assessment, so they understand what teachers need to create lessons. GenYES provides curriculum that teaches students all these skills and guides them through the process of planning technology projects with teachers. There are many more examples of this type of student support of real 1:1 programs later on in this guide.



Student tech support teams

Fixing broken hardware and software is what most people think of first when hearing about student support of technology. However, it must be carefully planned and managed to provide secure, successful, useful support. It involves trusting students with new responsibilities, careful management of students, constant review, and integration with IT staff.

- Students must be trained, not only in the technical aspects of tech support, but also customer service and follow up.
- Put one teacher or staff person in charge of the student program. It is imperative that strong relationships develop between students and that adult.
- Have veteran students recruit and mentor incoming students. Returning students are the lifeblood of a student tech team as they gain experience and skill. Encourage peer mentoring to develop a culture of student leadership.
- If students are prohibited from accessing computers, there are still many problems to fix. Students can answer selected help desk requests and often provide support for simple problems.
- The best way to learn tech support is to do it and work with others doing it. Model "out loud" problem solving as you fix problems yourself.
- For best results, professional IT staff should be involved in decisions about the boundaries of what students can do and have access to.
 However, professional IT staff should not have to monitor student work if they don't want to.
- Security and other issues should be discussed with administration and IT staff ahead of time. It is important that everyone agree on expectations for student behavior, escalation procedures, and the role of adult mentors before the program starts.
- Student tech support should be tracked and monitored just like professional IT staff track and monitor their work. GenYES provides an online tool specifically for this purpose. An additional benefit of tracking student support is to show measurable results of the student tech team's work.
- Students can earn certifications from your device manufacturer. Some schools have created a certified help desk that generates rebates from the manufacturer for doing their own repairs.
- In elementary and middle school, it is less useful to have students participate in formal tech support. Focus on teacher classroom support and there will be plenty of opportunities to fix small issues as they arise.

Integrating with professional tech support

Some schools are willing to treat students as part of the broader tech support staff solution. In this case, student participation often leads to a formal or paid internship.

However, some IT staff will not want to deal with students. In these cases, student tech support should focus on support for teachers using classroom technology.



GenYES offers an online help desk that is designed for student tech support work. With tools such as this, student work can be kept separate from IT staff, but still be tracked and reported.

Essential elements

Most schools combine both hardware and instructional support models when they develop a student tech team. No matter how you blend them, here are several essential elements that successful programs share.

- School acknowledgement. The student tech team should be a recognized part of the school. Funding, resources, a place to meet, and acknowledgment in school events, websites, and newsletters.
- Identity. The student team should have a name, shirts, hats, lanyards, a logo, and other standard items that school clubs have. Create recognition for student leadership with certificates, banquets, and awards.
- The primary student benefit is academic. This should never be about using kids for free labor. Programs must include training for the students, constant monitoring, and new learning opportunities. Emphasize academic skills such as technical writing, collaboration, programming, and troubleshooting.
- Increasing leadership challenges. Find ways to constantly add new student roles. Your students will get bored and leave if they are only allowed to do routine tasks. Reward hard work with recognition and additional responsibility. Challenge your students to push for excellence in all areas.
- Encourage student voice. Invite student feedback and act on it. Create opportunities for student-led initiatives, let students speak at board meetings and conferences, and allow them to initiate new ideas. Find ways for students to own this program, from naming and decorating device carts to putting students on the technology committee.
- Maintain strong relationships. An adult mentor with a strong personal relationship with students will have a more successful, secure program.
- Focus on learning. Work with teachers to find ways to support classroom curriculum with new technology. Technical support that fixes broken hardware is only half the problem. Students can help teachers find ways to use technology in lessons and student assignments. This support reduces teachers feeling overwhelmed by so much change in the first years of a 1:1 program.

Selecting students

Don't assume that only "techies" can participate. There can be roles for artists and animators to create user friendly help guides for the devices. Students interested in acting and video production can create video tutorials. Outgoing, gregarious students may be perfect trainers and workshop leaders. Students often become interested in teaching as a profession when they find out how rewarding it is to teach others.

Support your team by acknowledging all kinds of abilities and supporting team bonding. Social activities offer other ways for teamwork and collaboration skills to flourish. Invite non-techies and girls into the group by being extra aware of nonverbal messages that say, "Stay away". If you have a space for your tech team, ask some girls if it feels welcoming -- and be prepared to make changes.

The effort spent blending these students into a single team shows them that their individual contributions are valuable. Teams that learn to value each other learn important lessons in collaboration and teamwork that go far beyond technology skills.

Logistics

At the middle and high school level, a student tech team can be setup as an extracurricular activity or club. However most schools find that scheduling an student tech leader class works best. This class can meet in a specified period or be distributed throughout every period to ensure constant availability of these "STLs."

A few schools have a technology, video production, or multimedia class that doubles as a tech support class. In some schools, students take the tech team as an independent study class. Each period, a few students sign in with a teacher or advisor and answer help desk requests or work on projects as required.

In elementary schools, a student tech team can meet before or after school to learn about technology. These students typically support teachers with planing technology infused lessons. A common scenario would be to recruit one or two students from each 3rd, 4th, and 5th grade classroom thereby ensuring those classes are "covered." These students would also assist teachers and peers in grades K-2.





Sharing stories about student support in 1:1 schools

"The GenYES Student Technology Leader Team is a great learning experience for these students because they are gaining knowledge about how the tablet PC is built, as well as basic PC maintenance skills and teamwork. They worked as vital parts of a team that included five adults and the fourteen students. Several of these students do not have a talent or area where they feel special or unique. The Student Technology Support Team is providing that niche."

Cherilyn Ziemer - Technology Director, Northland Christian School, Houston, Texas

In 1:1 schools across the country, students are providing support for teachers, peers, and administrators. Generation YES provides two programs that focus on creating groups of students who learn how to use technical AND people skills to make sure that technology is being integrated into classes, projects, and more.

GenYES is a curriculum and set of online tools that creates a student tech team. These students work on Teacher Assistance Projects (TAPs) using the TAP management system found in the GenYES online tools. By using these tracking and reporting tools, GenYES students and their GenYES Advisor can help teachers with classroom technology projects and technical support. GenYES has been implemented in thousands of schools around the world in grades 4-12.

TechYES is a student technology literacy certification program for grades 6-9 where students complete authentic projects to show their technology skills. As part of TechYES, student mentors learn how to help their peers with technology literacy projects. "Our GenYES students provide technical support to keep things running smoothly. The GenYES students have done everything from setting up printers and IP addresses to constructing the laptop carts. We're using a GoogleSite page to create and post step-by-step directions and screen captures to help students troubleshoot common problems with their new laptops. This year, our district moved from Eudora to GoogleMail. To help with this transition, the GenYES students become experts in its features and are helping the teachers figure out how to add contacts and organize their mail in folders."

Ann Powers - Tongue River Middle School, Ranchester, Wyoming

"Over the course of teaching technology classes and GenYES, I have found the more autonomy I give students, the more responsible they become. They are vested in the program and ultimately learn to manage coursework and tasks. Indeed those are workplace and college skills they will need to be independently successful.

So, I think the crux of what I am teaching is absolutely that. How to self motivate, manage time, evaluate what you are supposed to learn and accomplish it. Work independently, seek help when needed, find resources, collaborate with colleagues (other students) these are all life skills and college skills."

Debbie Kovesdy - GenYES Facilitator at Shadow Mountain High School, Phoenix, Arizona

"Middle school iTeam members are meeting regularly and developing small-Generation group projects as part of their efforts to earn TechYES certification. They tried to use the touch-sensitive Teamboard in the Media Center to share progress on their projects. When they connected one of their laptops to the board, they discovered an applied math problem. The cursor normally should follow where you draw; this cursor moved away from their fingers in the vertical direction. The problem prompted discussions of x- and y-axes and ways to understand the movement of the cursor. They are helping staff in the Tech Department to get the Teamboard working properly with their machines and will help peers and teachers to learn how to use it when they find a solution to the challenge."

TechYES Facilitator Steve Spaeth - Mt. Ararat Middle School, Topsham, Maine



"Two GenYES students, Cristina and Melissa, worked directly with their partner teacher, Mrs. Sarcona, to take small groups of her third graders and integrate the use of laptops with an animal adaptation unit. The girls and Mrs. Sarcona coordinated this unit beautifully. I almost felt left out, they were so efficient! To start, Cristina and Melissa made PowerPoint presentations to show the third graders the fun they would be having with technology while learning about animal adaptations. The girls also showed their students the proper care and handling of the laptops. Motivation to work in this group setting was very high!"

Don Kinslow, GenYES Facilitator - Parkview Elementary, Chico, California

"As we introduced the one-to-one program, we also had to ensure that we had adequate technical support for the 225 student tablet PCs, 50 teacher/staff tablet PCs and 200 desktop computers on both campuses. The GenYES student team was created to assist the Staff Technical Support Team in supporting our growing community of users. GenYES students are not required to possess specific skills to enroll, but they must have an enthusiasm for technology and a genuine desire to learn. This year, our ten GenYES interns work as vital parts of a team that includes five adults and ten students. These students are gaining a vast amount of technical skill and knowledge from their internships. They are also developing the interpersonal support skills and selfconfidence that empower them to daily provide technical support to teachers on both the elementary and secondary campuses. The GenYES team has proven itself to be reliable, technically competent, and enthusiastic in performing this vital function."

Cherilyn Ziemer - Northland Christian School, Houston, Texas

