Student Tech Teams

Supporting school technology initiatives with
student tech teams.

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Introduction

Digital Promise, with support from the Verizon Foundation and Verizon Wireless, partners with one hundred U.S. middle schools across the country to create innovative learning environments and fully document the process so others can learn from their experiences.

With a goal to close the digital learning gap at a diverse array of middle schools, this initiative provides students with one-to-one access to mobile learning technology in the classroom and at home. Since the inception of the program in 2014, student tech teams have been a key factor in the success of the Verizon Innovative Learning schools (VILs) technology initiatives. This guide is designed to explore the impact of student tech teams and to provide schools with the tools necessary to start their own.

Rationale

Students are arguably the most important, and often under-appreciated, stakeholders in a school technology initiative. Involving students directly in the planning, execution, and day-to-day management of a technology program can help to ensure buy-in and support. Student tech teams not only help with resolving device issues, but they also provide an opportunity for students to take on leadership roles in the school, develop a STEM-based skill set, and collaborate in an innovative learning environment. All VILs schools create a student tech team at the beginning of the program, and school leaders commonly cite the team as an element critical to ongoing success of the initiative.

In fact, one-third of VILS student tech team leaders and administrators say that implementing a student tech team should be the **#1 priority** when starting a technology initiative.

Watch this video to see how one school transformed its culture and students through a student tech team:

Watch *Armstrong Tiger Techs*

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Getting Started

Not sure where to start? Here are the first steps to setting up a student tech team at your school.

1. Find the right teacher leader

Who is the most excited about your technology initiative and the opportunities it brings to students? This person does not need to be the most tech-savvy staff member, but instead, should be someone who embraces the technology and is willing to learn alongside students while giving them the opportunity to explore. It helps to have a leader who is strong instructionally, yet is willing to let students run with their ideas and drive their own learning.

The ideal leader...

- Believes in empowering students

- Has a strong instructional vision for technology use in the classroom

- Has a flexible schedule and/or the time to meet regularly with the team

- Is comfortable with ambiguity and with a student-driven learning environments

2. Ensure support from administration

In order to run a successful tech team, you will need support and resources from administration. Specifically, the team needs a dedicated meeting time which either means freeing up a teacher's schedule or identifying to a teacher to run the tech team as a club before or after school. If held as an elective during class time, student schedules may need to be reorganized.

Over 50% of VILs tech team leaders said that the biggest challenge in creating and sustaining a student tech team is *time*. Make sure administrators are on board with the plan to provide sufficient time and resources to both students and adults involved in the tech team.

3. Recruit student leaders

Establish an application process. Find the quiet leaders, tech experts, and potential hackers. Student tech teams are about giving students an opportunity for leadership; find the students who may not be natural leaders in the traditional classroom and give them a chance to excel. Also consider getting the students who might try to break your system on your side. They'll find the flaws, help you fix them, and in turn, develop ownership of the system and work to protect it.

"When I was looking for students for the tech team, I asked for teacher recommendations. I wanted kids who had leadership potential, but wouldn't necessarily volunteer themselves. Or students who needed an outlet...who hadn't been given leadership opportunities before. I've had (the tech team kids) since 6th grade and now they're in 8th grade. Those kids have just changed dramatically and I think the tech team has been a major part of it."

— Alison Francis, Instructional Coach, Fulton County Schools (Atlanta, GA)

In your tech team application, ask students why they want to be on the tech team and if they're willing to make the sacrifice necessary to take part. For example, students may need to commit to signing up for the tech team elective instead of another elective, or coming in early a few mornings a week for meetings.

Looking for a sample application? Check out this one from Charles W. Harris School in Cartwright School District (Phoenix, AZ).

4. Manage and train your student tech team

Students are technology natives and will learn quickly on the job. However, it will be helpful to provide them with some initial trainings and resources. To start with the basics, bring in your school or district IT staff. Have the IT staff members teach the team how to diagnose a problem, first line troubleshooting tactics, and other useful strategies. *(For more information about how the IT team and the tech team might work together, see "Considerations & Trade Offs").*

Provide sample troubleshooting guides and strategies to students. There are many available online from both school districts and technology vendors. Start with the device manufacturer and build from there. Many vendors have simple to-the-point guides for device troubleshooting. Additionally, kids are really good at Googling, so let them explore and find the best resources!

Lastly, even if you don't have lots of training tools or a full curriculum in place, don't be afraid to get started and build as you go. Let students be a part of the tech team construction process and allow them to help identify needs.

"It's not a norm for me to jump into things without having all or most of the logistics or details in place, but when it comes to the Student Tech Team I would recommend getting started ASAP. It almost helps for the adults not to know exactly where or how they will use their team, because the students get to be a part of it. They truly know what their school needs to be successful, both for their teachers and peers."

— Vanessa Zurita, Instructional Coach, Cartwright School District (Phoenix, AZ)

5. Create opportunities for learning

Give students the opportunity to learn more about what they're interested in, and to share their knowledge with teachers and peers. Most tech team leaders report that learning in the tech team context is student-driven. Tech team leaders ask students what they want to learn, and let them lead the learning after an initial brainstorming session.

"Don't hold them back! It has been an amazing experience watching them build confidence in their ability to lead, problem solve, and innovate."

— Ryan Goodman, Instructional Coach, Polk County Schools (Benton, TN)

A few suggestions for getting started:

- Ask students to explore new ways to use tools that they are already using in class; ask them to share those ideas with teachers

- Direct students to find a new tool and determine if it would support learning in their current classes; if it would, ask them to share those recommendations with teachers

- Allow students to participate in the app approval process

- Facilitate a student-led professional development session for teachers on tips and tricks of using specific apps or to introduce new resources

- Encourage students to make connections between technology and tools that they are using in one environment to other subjects and learning environments; for example, one VILs tech team leader encourages her students to think about how they could use their school's maker space for broader learning opportunities in their regular classes

"Our students, a lot of it is really self-driven. They're researching and coming up with the topics and ideas that they want to learn about. And then they learn about them. I'll say, "I saw a teacher using this but I've never used it, can you guys go in and figure it out?"...When they go out and share it with others in the building, it's their thing. It's impactful and motivating for them because it's student-led and student-driven."

— Alison Francis, Instructional Coach, Fulton County Schools (Atlanta, GA)

Benefits

To identify the biggest benefits of student tech teams, we surveyed two dozen coaches and administrators who have tech teams supporting 1:1 device programs at their schools. Here is what they told us:

Top Benefits

#1 Student Leadership

100% of respondents cited Student Leadership as a benefit to creating and sustaining a student tech team.

Tech teams should be based on a foundation of student leadership and self-directed learning. Implementing a student tech team creates a unique learning and leadership opportunity in a school.

"We implemented a tech team to empower our students to take a leadership role on the campus and to create self-directed learning for those students."

— Derek Etheridge, Principal, Cartwright School District (Phoenix, AZ)

"Focus student goals on ownership, student voice, and leadership over gaining tech knowledge."

— Thad Austin, Instructional Coach, San Francisco Unified School District (San Francisco, CA)

#2 Technology Skill-Building

96% of respondents cited Technology Skill-Building as a benefit.

Developing technology skills is a natural result of student-directed learning. Many student tech team leaders report that giving students the freedom to explore and work hands-on with technology results in robust skill development.

"A lot of it has been putting in place procedures to let (students) self-direct their learning, and letting them realize they don't have to wait for me to learn things... It's letting kids know that you can't be the expert of all things. Letting them know it's a safe space to try things out."

— Vanessa Zurita, Instructional Coach, Cartwright School District (Phoenix, AZ)

Other Important Advantages

More than 50% of respondents noted each of the following as advantages to creating and sustaining a student tech team:

79% Student Ownership

Student tech teams are a great opportunity for Project-based learning and Challenge-based learning. If you are lucky enough to have a class dedicated to the tech team, consider how to incorporate project- and challenge-based activities into the curriculum.

71% Increasing Student Voice in the School Community

Student tech teams create an opportunity for students to own their learning and tell their stories. Many tech teams let students investigate apps and resources and share what they've learned with teachers and peers. Students are able to recommend the most effective tools to use in the classroom, and give feedback on the tools they currently use. Student tech teams also frequently serve as 'storytellers', using digital media to create and distribute the stories of life at their school and in their communities.

63% Student Support for Teacher Professional Development

Providing students with the opportunity to share their tech knowledge with teachers is a great way to spread knowledge and resources among staff. More formal professional development sessions also allow students to practice presentation skills and build confidence. An added bonus - most of our tech team leaders report that teachers would rather learn technology skills from students than from coaches or other teachers. Take advantage of a captive audience!

"Help your students learn how to help teachers. They will be able to give you great insight into the happenings in their classes and will know what their teachers are doing with technology even better than you will!"

— Maureen Young, Instructional Coach, Ypsilanti Community Schools (Ypsilanti, MI)

"I've learned that my staff is much more receptive to learning about how something has changed if it's coming from one of the students than if it's coming from a teacher or a coach that they see as the tech person."

— April Wood, Instructional Coach, Knox County Schools (Knoxville, TN)

58% Decreasing Technology Issues in Class

Student tech team members will naturally serve as the technology leaders in their classes outside of tech team time. They frequently take on the role of assisting the teacher and their classmates in resolving technology issues in real time.

"My goal this year is to provide professional development on certain apps and tools that teachers will be using in the class so that they in turn can help assist with other students when tech help is needed."

— **Regina Meeks, Instructional Coach, Charlotte-Mecklenburg Schools (Charlotte, NC)**

"It removes some of the intimidation too. As a teacher, you've got this feeling that you have to know it all and be prepared, because what if something doesn't work? But then you've got the kid who is coming to you and saying, "I can help with this." It's a teacher helper you've always wished you had in your class. They're able to step up and take that role. It's great."

— **April Wood, Instructional Coach, Knox County Schools (Knoxville, TN)**

54% STEM Education

Not only do tech teams give students hands-on experience with technology, but they also provide opportunities to participate in other STEM-related learning, such as coding, virtual/augmented-reality, and video/photo editing. Tech team leaders report using their teams to experiment with STEM-related curricula, and if successful, to spread those ideas and lessons throughout the school. For example, the tech team could pilot a coding lesson or unit, provide feedback and help adapt the lessons, and then assist other teachers in understanding how to use it in their classrooms.

Trade offs & Considerations

Starting a student tech team is not without challenges, but supportive school leadership and a creative and dedicated tech team coach can make it happen. Below are a few things to consider.

Scheduling

Unless you already have a technology elective or club, dedicated time will be required for your tech team to meet. Many schools find that a tech team elective that meets multiple times a week during the school day is the most robust model for implementation. However, if your class schedule does not allow for this option, consider a tech team club that meets before school, after school, or during lunch.

Not only will you need to find time for students to meet, but you will also need a teacher's time (or potentially that of an IT staff member). This may mean creating a new prep for a computer teacher or media specialist, or including the elective in a technology coach's schedule.

Don't underestimate scheduling. **Over 50% of VILs tech team leaders said that the single biggest challenge in creating and sustaining a student tech team is *time*.** This is a challenge that can be overcome, but takes careful planning, input, and support from a number of stakeholders.

Training

Technology

Training a student tech team may seem daunting, but fear not! Most of a tech team's training can happen "on the job" and students will learn most through opportunities to work hands-on with the devices. However, at the outset, you may consider bringing in a district IT leader to teach students the basics of the devices and the issues they might run into. Another great option is reaching out to local hardware and software vendors to see if they would be willing to host a field trip for students to come in and get a skill-building or troubleshooting lesson. Most vendors are more than willing to do this, and it creates a fun trip for your students.

"Start as soon as you can! I met with my students before the school year started...and I can't imagine this journey without them. Don't be afraid to be open and honest with them. They are kids, but they have very creative solutions and want to see their school succeed."

— Vanessa Zurita, Instructional Coach, Cartwright School District (Phoenix, AZ)

People skills

Training may also include strategies on how to interact with the students and teachers who need help. Many students may need to further develop empathy and patience to ensure a positive experience working with a teacher or fellow student who is not as tech savvy.

By identifying strengths and weaknesses, and focusing on a growth mindset, students can better understand how to be helpful and kind to those they support.

Ownership of Technology

One potentially complicating factor of student tech teams is determining where ownership of technology and incidents lies. In many districts, the IT team has complete ownership over the devices and infrastructure. However, in an environment where a student tech team plays a critical role, some of that control will need to be released. When implemented well, a student tech team can take most of the simpler issues off the hands of the IT team, freeing them up to devote time to more complex issues. It takes thoughtful planning to set up an effective system of escalation and to ensure that roles and responsibilities are clear.

To see an example of how a tech team can work together with school and district IT, check out this video from a VILs school in West Ada School District in Boise, ID: Creating a Smart Tech Plan.

Watch *Creating a Smart Tech Plan*
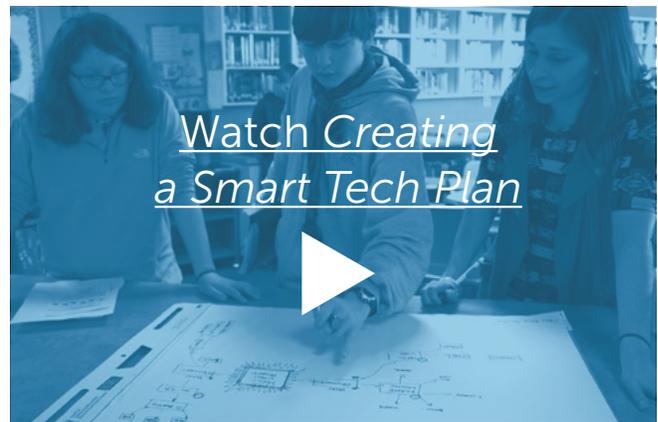
Conclusion

Hopefully this guide convinced you that student tech teams are an essential element to any school technology program and provided a few tools to get you started. Tech teams give students an opportunity they wouldn't normally have - a chance to lead their teachers and peers in developing vital 21st century skills.

As VILs leaders tell us, the time it takes to build a student tech team is time well spent, and you won't regret it!