

Chapter 7 – Basic GenYES Curriculum: Units 1-3

All GenYES schools have access to the first three Units of GenYES Curriculum:

- ➡ Unit 1 - Getting Started Guides
- ➡ Unit 2 - Speciality Technology Guides
- ➡ Unit 3 - Wrapping Up Guides

These units are meant to provide a solid base for GenYES clubs and classes to get started with student support for school technology integration. These three units offer multiple activities and resources that guide GenYES classes and clubs through the major innovative activities that make GenYES special.

Unit 1 - Getting Started Guides

The activities in this unit introduce students to the GenYES program through eight 90-minute club-style meetings. They cover using the GenYES tools, working and collaborating with teachers, planning projects, troubleshooting, and information literacy, and establish the fundamental student-centered philosophy of GenYES.

Expansion activities are included for implementation in a GenYES class. The activities should be broken up to fit into the class schedule.

Each activity in this section includes:

- Overview
- Student Objectives
- Teacher Preparation
- Time
- Procedures
- Evaluation
- Resources - these can be useful handouts, links, videos, and vocabulary

Using Unit 1 in a Class or Club

Unit 1 - Getting Started Guides in a Club Model

These activities are meant to be very flexible to accommodate GenYES club implementations. You may not have every student available at every club meeting, but it is important to get started with as many students as possible doing at least the first four activities as a group.



Bringing students together for a Saturday “boot camp” can be a successful strategy. Building a team relationship between the students is an important part of starting and sustaining your GenYES club.

Unit 1 - Getting Started Guides in a Class Model

These activities should **ALWAYS** be the first things you teach in your GenYES class. Many teachers assume that it is better to sneak some technology activities in before tackling the GenYES curriculum. We urge you not to do it this way. These activities give the students context for the entire class and learning their new technology skills. You should find that students will pick up the technology skills more quickly than you expect once you give them the responsibility and the context for creating projects that help teachers.

Expansion activities are included for implementation in a GenYES class and offer a variety of ways students can use available technology as a “fun” way of covering the material in the Activity Guide. The activities should be broken up to fit into the class schedule.

List of Getting Started Guides

What is GenYES?

This activity introduces students to the GenYES program and explains how they will be collaborating with teachers (and other adults) to help integrate technology into your school. By the end of the activity, each student will have established a GenYES website account and completed a pre-survey.

Becoming Familiar with GenYES Tools and Resources

Students will spend most of their time in GenYES working on Technology Assistance Projects (TAPs) with collaborating partner-teachers. The online TAP tool, accessed from each student's GenYES account, is key to managing and tracking TAPs. In this activity, you assign sample TAPs to give students practice using the tool. At the same time, these TAPs will make students aware of your school's Acceptable Use Policies and general guidelines for using technology safely and appropriately.

Collaboration and Communication

Now that students know how the TAP tool works, they are ready to learn how TAPs help teachers and other adults in their school. Collaboration between students and teachers is key to the GenYES process and students need to understand their responsibilities as co-partners in the model. In this activity, students discuss interpersonal skills and critique the student-teacher interactions in a role-play exercise.

TAPs and Learning

As with any tool, there are effective and ineffective ways to use technology to enhance learning. This activity is designed to get students thinking about the ways that they learn best, and how TAPs can help teachers create more

engaging and active learning experiences for students. The themes of this discussion should be an ongoing component of your GenYES program as students work on TAPs and continue to think critically about their own learning.

TAPs and Teaching

This activity is intended to give students a taste of how teachers do formal lesson planning. Students will discuss lesson-planning and see some examples of past GenYES lesson plans. Depending on the structure of your program, you can also have students practice creating their own in-depth lesson plans in preparation for their TAPs. Not all TAPs involve creating a technology-infused lesson plan but many will. This activity will prepare GenYES students for this kind of TAP.

Troubleshooting and Tech Support

Whether or not advanced technology infrastructure support is an integral part of your GenYES program, your students will inevitably encounter problems with the technology they use themselves and with teachers. This activity introduces principles of troubleshooting, finding solutions, escalation, and preventative maintenance that will help get your students started with tech support.

Tutorials

Your students will undoubtedly find times when they need to teach a teacher or another student something about technology. This activity teaches students how to write or perform a good tutorial and how to use the GenYES Wiki to create a custom tech support resource for your school.

Information Literacy

In order to take advantage of the opportunities and knowledge available on the Internet, students must be able to judge the quality of information, assess the reliability of sources, and know how to stay safe online. This activity introduces these skills and provides foundational guidelines for students to follow throughout GenYES and any work they do online.

Unit 2 - Specialty Technology Guides

The activities in this unit can be used as the basis for lessons for a GenYES class, as inspiration for TAPs, or as small-group GenYES projects. They are designed to show how GenYES students can help teachers with popular educational technology resources already in your school.

When new technology purchases are used often and well, it shows the administration, community, and parents that technology is worth their investment. The goal of this unit is to provide you with very flexible resources and suggestions about how to tailor your GenYES program to mesh with the hardware and software you probably already have.



These activities do not have to be conducted as whole-class lessons. You may select whether to teach the activity as a lesson for the whole group, or whether to train individual students as the need arises and create a small group of student "experts" who can tutor their peers.

Each activity outlines broad procedures for introducing a specific technology to GenYES students. Additionally, each activity highlights special considerations for each type of technology and provides ideas for how this technology can be used in TAPs. Encourage your GenYES students to browse these resources on their own if you choose not to lead a lesson.

List of Specialty Technology Guides

Handhelds

Handheld computers are growing in popularity as an educational tool. They are versatile, portable, and easy to use--especially when GenYES students are there to help teachers find ways to use them in their classrooms. GenYES students can quickly master handheld technology at almost any age, and this can be a very effective way to show that these students are really making an impact.

Help Guides and Video Tutorials

This activity goes into greater depth about student-created tutorial projects, focusing especially on video tutorials. Tutorials make great projects for students to work on in a lull between TAPs, or to use as a quick reference guide for a TAP that requires them to teach a class or a partner-teacher some technology.

Digital Storytelling

Digital storytelling is an increasingly popular technique for allowing students (and others) to express their unique voices through technology. Using video, narration, digital photographs, and music, students can tell and share their own stories. This activity can be used as a resource for TAPs, or it can be a project for GenYES students to practice editing digital audio and video.

Inspiration and Kidspiration

Inspiration Software, Inc. offers visual thinking tools for elementary and secondary students. These applications help students create visual diagrams, thought charts, and organized brainstorming and can be a great tool for research or creative projects in any subject area. If your school has purchased one or more of these products, this activity suggests numerous ways Inspiration can be used in TAPs.

Tech4Learning Tools

Tech4Learning offers software and online tools that help students create multimedia projects. If your school has purchased Tech4Learning materials, GenYES students can use them to create graphics and videos for almost any TAP - presentations, websites, or class projects.

CyberSmart!

The CyberSmart! School Program is designed to introduce students to the skills necessary to use computers and the Internet safely, responsibly and effectively. Generation YES has partnered with CyberSmart! to make these free, proven, and easy-to-use resources available as an extended option for teaching web safety skills with GenYES students.

How Unit 2 - Specialty Technology Guides fits in to GenYES classes and clubs

The Specialty Technology Guides can be used in a number of ways. You can use them as filler lessons, or as independent study resources for advanced students. They cover topics and specific hardware or software use that will not be of interest to every school, such as handheld or PDA programs and digital storytelling. In addition, many students find that their partner-teachers would like some assistance with a specific software application. For example, elementary teachers often ask a GenYES student to help them with class projects that use Inspiration, software designed to build visual maps. GenYES Advisors can facilitate this by using the Project Starter on Inspiration and Kidspiration.

There may be times when a GenYES Advisor uses these Specialty Technology Guides to deliver a whole class lesson, especially if GenYES students have been asked to support a new hardware initiative in the school, such as helping teachers use handhelds. In this case, it is important for the whole class to learn about handhelds. Alternatively, however, you may have a situation in which only one partner-teacher needs help with a topic covered in this section. If you have a student who is up for an independent project, these Specialty Technology Guides can be a great resource for them.

Unit 3: Wrap-Up Guides

This unit contains concluding activities for a GenYES program. In addition to completing any last TAPs, students create a portfolio of their work and discuss ways to publicize their successes and recruit students and teachers to participate next year. This unit also covers the important end-of-year surveys for students, Advisors and partner-teachers, which provide data for program assessment and summative reports. Finally, celebrate your achievements and recognize outstanding projects in a class- or school-wide ceremony.

Portfolios

Every TAP or project created in GenYES is an "artifact," meaning a piece of work that shows what a student has learned and accomplished. Creating portfolios is a good way for the teacher of a GenYES class to do an authentic assessment of each student's technical and academic progress. For clubs or other programs where students do not need a grade, cumulative portfolios provide an opportunity for students to showcase and share their best work.



Finishing TAPs and Year-End Surveys

A few weeks before the end of your GenYES program, students will need to stop receiving new TAPs and concentrate on finishing up any outstanding projects (and on completing their portfolio, if necessary). Every GenYES student, along with the GenYES Advisor and all the partner-teachers and other staff members who requested TAPs during the course, must complete a final survey about the program before the course ends.

What It Means To Be a GenYES Graduate

This activity prepares graduating GenYES students to provide continuing tech support and leadership in their schools and community. Students also collect data about the help their TAPs provided and create ways to share their accomplishments and promote the GenYES program to other students, teachers, schools, and the community.

Celebration and Recognition

No GenYES class or club should end without a chance to applaud the students for their great work! This activity suggests ways to recognize your GenYES students' accomplishments with an assembly, parent night, certificate ceremony, or other celebration. Students can take the lead in planning and running this event.

Chapter 8 – GenYES Extended Curriculum Units (Optional)

Some GenYES schools will have access to the optional GenYES Extended Curriculum. These units contain extensive lesson plans and resources designed to help a teacher teach a daily GenYES class, or to support a GenYES club Advisor who has limited experience teaching technology.

Extended Curriculum Unit Overview

There are currently 24 units of GenYES curriculum available. But don't worry, there is NEVER an instance where an Advisor would want to use all 24 units in a single course. The goal is to provide a very flexible range of resources to pick and choose from. Each GenYES school can design their own path through these units, and in fact, could have different paths for different GenYES classes.

Each unit contains multiple activities, with each activity designed to provide at least one class period of student activities and projects.

Units	Group	Focus
1*	Getting Started Guides	Introducing GenYES, collaboration skills, teaching and mentoring, project planning, beginning tech support
2*	Specialty Technology Guides	Ideas for GenYES projects, suggestions for software and hardware, guides to using common school software and hardware
3*	Wrap Up Guides	Completing the GenYES course
4 - 8	Technology Skills	Online research, digital media, presentations, multimedia, web publishing
9 - 13	Technology Support	Troubleshooting, problem-solving, customer service, documentation, technical writing, preventive maintenance, understanding operating systems, hardware and software



Units	Group	Focus
14 - 18	21st Century Units	Cyber-safety, media literacy, career exploration, building portfolios
19 - 22	Leadership Units	Teaching as leading, being a leader, leadership characteristics
23 - 24	Community Service Units	Community leaders, community service projects

* Included in GenYES Basic License

All Curriculum Units are fully accessible online, and each activity contains extensive video, print and web-based resources that support the teaching and learning process.

Technology Skill Units

Unit 4: Online Research and Information Literacy

This unit gives GenYES students the understanding and skills to locate, authenticate, evaluate, and use web-based information and resources effectively and efficiently. These information literacy skills often play a crucial role in determining the overall value and success of a TAP.

Activities

- Web Search Tools and Strategies
- Evaluating Web Resources
- Copyright and Citation

Unit 5: Online Communications

This unit introduces students to the range of electronic communications tools provided by the GenYES website, or by partner organizations. It covers safety issues associated with online communications, as well as examples of and suggestions for TAPs involving telecollaborative learning.

Activities

- Safe and Effective Online Communications
- Email
- Blogs and RSS
- Instant Messaging and Chat
- Telecollaborative Learning Projects

Unit 6: Digital Media

Most of today's students have spent their entire lives surrounded by and using computers, video games, digital music players, digital still cameras, video

cameras, and all of the other toys and tools of the digital age. Computer games, the web, digital slideshows, video cell phones, satellite radio, and more recently, podcasting and video blogging are integral parts of the lives of this generation. This unit will familiarize students with the tools available in your school for creating and sharing original digital media projects.

Activities

- Computer Graphics and Animation
- Digital Photography
- Desktop Video
- Digital Audio

Unit 7: Multimedia Presentations

In this unit, students learn the principles and skills necessary to plan, develop, and present multimedia slideshows and other digital creations to convey information and help teachers present instructional material.

Activities

- Planning a Multimedia Presentation
- Creating a Multimedia Presentation
- Delivering a Multimedia Presentation

Unit 8: Web Publishing

This unit will give GenYES students the tools to create content for the web. By learning to create their own websites, not only will students be able to support learning in teachers' classes, but they will also learn a structured process of design and development that they can use in other classes or for their own personal interests.

Activities

- Web Page Design
- Web Page Construction - HTML
- Web Page Construction - Software
- Advanced Web Development Skills

Technology Support Units

Unit 9: Hardware

This unit provides an introduction to computer hardware, providing hands-on experience assembling and disassembling computers. Students build good troubleshooting and repair skills by gaining an understanding of the functions of computer parts and how they relate to one another.

Activities

- Understanding Computer Components
- Component by Component: Going In-Depth
- Boot-Up and Information Flow



- Disassembling and Reassembling a Computer
- Comparing Computer Hardware Specs

Unit 10: Software

Understanding how software works is the basis for understanding how software breaks. Many tech support tasks involve software applications that don't work. This unit gives students a basic understanding of software, from bits and bytes to operating systems and applications. This understanding will help students grasp how software interacts with computer hardware, peripherals, and the user.

Activities

- Getting Started: Bits and Bytes
- The Operating System and the OSI Model
- Installing an Operating System
- The Operating System: The Ultimate Traffic Cop
- Application Software
- How Do I... ? Using Help to Learn More

Unit 11: Tech Support: Problem Solving and Customer Service

This unit introduces the TAP as a tech support help desk tool. Students learn a structured interview process to follow as the first step to solving a technical problem, and practice organizing their thinking, documenting their tech support actions, and providing good customer service.

Activities

- The Art of the Interview
- TAPs and Job Tickets
- Practicing Client Interviews
- Fixing Problems for Total Customer Satisfaction
- Escalation and Follow-up

Unit 12: Researching Solutions

Giving students the tools to find answers to their own questions improves their skills as troubleshooters and independent thinkers. These abilities are valuable in every part of school and life, as well as in solving technical support problems.

Activities

- Software Solutions: The Best Sources
- Going Beyond the Vendors
- Professional Tech Support
- Peer Inventory of Knowledge

Unit 13: Housekeeping

While keeping dust out of a hard drive is hardly glamorous work, there is a lot of satisfaction in knowing that your school's computers are in top shape. Computer maintenance tasks give students familiarity with your school's technology resources and create a sense of pride and ownership in the

smallest details of the equipment. Maintenance tasks are also good routine TAPs for beginning tech support students.

Activities

- Maintaining Hardware
- Keeping Software Healthy
- Maintaining Multiple Computers
- Taking Inventory

21st Century Units

Unit 14: Contemporary Social Issues

In this unit, students brainstorm about social, vocational, and health-related issues that impact or concern young people today. After selecting a topic, each student researches the issue and creates a multimedia project that shares the information with the class.

Activities

- Choosing a Topic of Interest
- Contemporary Issues Internet Research
- Contemporary Issues Multimedia Projects
- Contemporary Issues Presentations

Unit 15: Cyber Safety

A key challenge in using technology in education is the need to keep children safe and personal information secure online, while still allowing students to explore and express themselves through powerful technological tools. This unit presents the practical rationale behind school security policies and helps students understand why following cyber safety rules is important, as well as building the critical analysis skills and sound judgment that form the best foundation for cyber safety.

Unit 16: Media Literacy

The revolution in information and communication technology has created a world where everyone is constantly surrounded by media. K-12 students on average spend over six hours consuming media every day, from television talk shows to magazine ads to Wikipedia. This unit gives students a chance to reflect critically on their media consumption and develop the skills to analyze and critique information for accuracy, reliability, and bias.

Unit 17: Media Influence

This unit addresses the influence of visual and textual media messages on student audiences. Students develop the critical viewing skills to analyze media messages and use e-mail to communicate their opinions with major teen advertisers.

Activities



- Analyzing Media Images
- Email Action Project
- Advertisement Design

Unit 18: Career Exploration

In this unit, each student selects a career to research on the Internet and describe in a multimedia presentation to the class. The activities emphasize advanced techniques for creating and delivering effective oral presentations that look and sound professional.

Activities

- Selecting a Career
- Career Internet Research
- Career Multimedia Projects
- Career Presentations

Leadership Units

The Leadership Units explore the relationship between personal leadership qualities that students can develop, what it means to be a leader, and finding leaders in the local community and world. It can be incorporated into a GenYES class or could form the basis for a whole semester follow-on class for GenYES veteran students. Either way, it is recommended for a second or third year implementation.

Unit 19: Communications

This unit expands on the concepts of communication, collaboration and teamwork that are central to GenYES. Students practice written and oral communication strategies to use when working with teachers or other students. In addition, this unit addresses the importance of communication in leadership and teamwork, focusing on consensus-building and constructive feedback techniques.

Activities

- Crossing the Data Pit
- Blogging and Written Communication
- Visual Literacy and Organizing Information
- Active Listening and Note-Taking Skills
- Advanced Teamwork

Unit 20: Leadership in the 21st Century

In this unit, students explore themes related to leadership in the modern world. By using technology to research and express various traits of good leadership, students will begin thinking of themselves as leaders not just in using technology at their school, but as active and responsible members of a team and a community.

Activities

- Leadership Qualities and Styles
- Illustrating a Leadership Quote
- Characteristics of World Leaders
- Technology Company Work Styles

Unit 21: Being a Leader

A primary emphasis of GenYES is the cultivation of student leadership in schools and communities. This unit helps students see TAPs, mentoring, collaborating, and all their other GenYES roles as part of a personal mission to lead by creating and sharing powerful projects with technology.

Activities

- Personal Leadership Style
- Personal Definition of Leadership
- Leadership Technology Projects

Unit 22: Teaching as Leading

This unit explores the role of teachers as leaders. As they examine learning styles, tutoring techniques, and the philosophy of hands-on, interactive education, students gain a better sense of what their teachers do, as well as understanding how they can use the same methods to share their knowledge in a constructive way.

Community Service Units

The Community Service Units are useful for a GenYES Advisor who wants to extend the service of the GenYES students into the community. It can be incorporated into a GenYES class or could form the basis for a whole semester follow-on class for GenYES veteran students. Either way, it is recommended for a second or third year implementation.

Unit 23: Community Leaders

In this unit, students organize a meeting with local leaders through the GenYES class. This Leaders Day event helps publicize GenYES in the school and community and helps students identify areas where they can volunteer to use their advanced technology skills to develop a community service project.

Activities

- Planning a Local Leaders Day
- Local Leaders Day Events
- Community Leadership Opportunities

Unit 24: Community Service Projects

This unit gives advanced GenYES students a chance to apply their technology skills outside of school on projects that help an organization in the wider community. Students identify technology-based community service



opportunities and use the TAP system to collaborate with community members, learn the necessary technology skills, and complete community service projects.

Activities

- Initial Community Partner Meetings
- Planning a Community Service TAP
- Community Service Results and Reflections

Curriculum Browsing

All GenYES curriculum is designed to be used in any order, to support the hardware and software environment at the school, and the needs and interests of the GenYES students and teachers.

The “tag cloud” seen to the left side of all the curriculum units (found in the **Learn** section) can be used to find activities, lessons and resources that have been tagged with keywords.

Click on any keyword to display a list of activities and individual resources.

BROWSE BY TAG

acceptable use accessibility animation
assistive technology audio bibliography
blogging cad careers chat citations
collaboration **communication**
community service
contemporary issues copyright css
databases design digital storytelling
elementary email file management
flash animation games genyes
graphics handhelds hardware help
html inspiration instant messaging
inventory iste layout **leadership**
learning lesson planning maintenance
media literacy mini-project
multimedia netiquette network
photography planning forms
podcasting port portfolios
presentations problem solving
programming project ideas publicity
roleplay rubrics searching
secondary security social issues
software speaking spreadsheets
storyboarding student voice **taps**
teacher reference teamwork
tech resources tech skills
tech support tech4learning
telecollaboration text messaging
troubleshooting tutorials
vendor resources video **web design**
web research web safety
wrapup writing