Why Should Libraries Care About Teens and Technology?

By Tiffany Williams

In March YALSA members will spend a week celebrating teens and technology during YALSA's seventh annual Teen Tech Week. While teens' use of technology continues to rise, especially as today's teens have always had technology in their lives, teens are not always using the library's non-print resources. Teen Tech Week gives libraries a chance to showcase the technology they have for teens, and also allows teens to learn, or improve, new skills or concepts, such as keeping safe in the virtual world. This article discusses why it is important to focus on teen technology use and skills, including common misconceptions, the digital divide, how libraries can help, and why it matters at all.

Misconceptions About Teens and Technology

It's easy to see how a few teens interact with technology and try to generalize those experiences to the entire population. When a teen helps someone set up a computer or download an app to their smartphone, it's a simple leap to assume they are all extremely knowledgeable about technology. Similarly, it's not difficult to think that because teens sometimes choose to share more information than an adult might share in an online environment, that the teens do not understand privacy. However, as teen advocates, we can do much more for teens by recognizing that anecdotal evidence cannot be generalized to the whole population. An accurate assessment of both technology abilities and gaps in technological knowledge, on the individual and community level, is important to designing and implementing experiences that teens will enjoy and learn from.

There are a number of misconceptions about teens and their use of technology. One such misconception is that teens know everything there is to know about technology. Do teens really know as much as we give them credit for? Or is it possible that they know a few skills, which seem so complex, that we attribute knowledge of an entire set of understandings to them? That girl who plays *World of Warcraft* for hours and can get rid of computer viruses: she can't adjust the margins in a word-processing document, and has no idea how to stop getting viruses in the first place. Those kids texting all day have no idea how to format a resume. They can Google anything and find it on Wikipedia, but don't know the first thing about using the libraries' vast information stored in databases (or even what databases are), or how to switch to Google Scholar to find credible information. They have misunderstandings about how information works on the Internet, often attributing both credibility and free use to items that are not either. Just as many of them cannot print an e-mail properly and cannot copy and paste an image into another program for printing. In truth, teens know what they use, what they practice, which often means that they are fluent in cellphone, social networking, and gaming. This often does not include a skill in databases, productivity suites such as Microsoft Office, or citing another's work properly.

Another misconception is that teens do not need to go through the same learning process with technology that other people do, that they just "get" it. Yes, it may seem that technology magically works for this age group, but this is not the same as teens REALLY knowing how technology works and how to leverage all of its potential. What is actually happening

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is that teens are using these devices on a daily basis. When confronted with something new, they look for familiarity with what they already know, which can look like knowing without learning. They may pick things up faster, not because it is technology, but because they are teens and because technology has always been a part of their lives, for as long as they can remember. When something new does come along, learning naturally comes easier when you are younger.

A final misconception is that every teenager has access to a cell phone, generally a smartphone, and at least one computer. In truth, not all families can afford for each member of the household to have a personal device. Of those that can afford a one device to one person ratio, not all of them have high-speed Internet, many relying on cell and data plans, which limits how much access teens have on a monthly basis. Additionally, teens have far less access to technology in school than many people realize. Many classrooms are not equipped for individual students to use technology except when presenting to the class. School libraries have computers, but students have a limited amount of time, if any, to use those computers before and after school. This difference in access is often called the digital divide.

The Digital Divide

The digital divide, as you may know, focuses on the difference between those with access to technology and those without. More than just a current buzzword, the digital divide describes a phenomenon that is not only very real, but also very relevant in an increasingly digital world. There is more to the digital divide than just access to pieces of technology. Another component of the digital divide is a difference in the skills people have. There is a divide between those with digital skills and those without.

There are several components to skill development; the lack of any one of these can lead to a divide. One such component is the access to software, and it is important to remember that access to a computer is not necessarily analogous with access to software. For years software was expensive, both for individuals and public institutions. Increasingly, there are free versions of software available to download as an alternative. Another component is the availability of resources from which teens learn. These resources could be people who are knowledgeable about a skill, websites with video tutorials, or access to technology databases. As cloud storage and access to programs increase, teens are more reliant on Internet connections to view and edit documents. Without a steady, reliable Internet connection, teens cannot even access the files they require.

How does the digital divide start? The divide can manifest in a number of ways. The following offers an example of how one fictional teen, Cameron, falls behind. It begins as a matter of simple access. Cameron's family has only one computer in the home. This means that access is shared among the whole family, with the youngest members of the family often getting less screen time. Unfortunately, Cameron has three older siblings, who each need the computer for homework in the evening. Their homework is more "complicated," and so their parents allow the older siblings more computer time than Cameron. Even in these situations of shared access, the impact of the digital divide can be seen. Cameron is consistently given a few hours less of computer time than the older siblings each week. Cameron could fall over one hundred hours behind each year. What begins as a small difference in the amount of access between teens can soon snowball into larger differences in competency. Over the course of several years, this adds up. You can learn a lot in one hundred hours, and you can miss a lot in that time, too. Some may argue that many of those younger family members will have phones, but that is not the same as access to a computer. Phones and computers, while similar, have different capabilities, and not all of them directly translate to each other.

The same teens that fall behind because of the digital divide are often the groups that libraries are currently reaching out to through a variety of programs and services—minorities, lower income patrons, first-generation patrons, and other marginalized groups.

Why All of This Matters

There are conflicting reports about the number of technology jobs that will be created in the next decade, but they all agree there will be an increase in technology jobs in the future. Even those teens who do not go into a technology field will need to use technology in their daily lives. They will need to create and properly format resumes. They will need to efficiently find information, for themselves, or their bosses. They will likely use e-mail to communicate with colleagues, share documents to work on group projects, which will not end with graduation. While the technology may be different in ten years, it will grow out of current technology, and falling behind now will make it more difficult to catch up in the future. Even now, it is nearly impossible to apply for a job without the ability to upload a resume and fill out an application online.

How Libraries Help

Libraries already provide computer and Internet access for their patrons. In some libraries, especially smaller libraries, there are few, if any, computers that are specifically designated for teens, despite

the fact in many of these same buildings children and adults each have their own set of computers. Which computers teens use depends often on whether the library groups young adult services with children's or adult services. In other libraries, teens are not allowed to check out technology such as laptops, e-readers, cameras, and other peripherals, generally because of the high price of such items and concerns about damage and theft. The first step that libraries must take is fighting to provide equal access to technology for teens. This may mean changing policies to allow them to check out technology, or making sure they have as much access to computers as any other age group. Space considerations are often an issue when it comes to providing computers, but a set of laptops is easy to store and gives teens the freedom to move about or congregate around the technology without interfering with other computer users.

Access to technology is only the first step in bridging the digital divide. The second step is to find ways for teens to develop their technology skills. This can be done in two ways, through programming and through resources. Before taking either of those steps librarians need to assess the skills their teens are lacking, which can be different depending on the community. A good place to start is by talking to parents, teachers, other librarians, and the teens themselves. Find out what skills the schools expect them to have, what questions are the teens asking while working on computers, and what skills they are likely to need in college, in employment after high school for future jobs, and in life in general. One way to gather this information is through a survey. Create one for students and one for teachers. Talk to the local schools to see if they can pass the surveys out during homeroom, or another class that all students take. You may be able to make use of the school's e-mail list to send a link out to parents. Another way to gather the information within the library is to keep a record of what questions the teens ask when they are using technology.

What Makes Great Tech Resources for Teens?

Technology changes at a pace that the print publishing world cannot always keep up with. In order to keep up with these changes, librarians should cultivate a list of digital resources for teens. It is important to keep these resources up to date. Some tips for choosing resources:

- Teens, and others, sometimes have a hard time paying attention for long periods of time. Look for resources that have a variety of deliveries. Short videos, concise text, and plenty of chances to experiment with what they are learning.
- Every teen is different and learns in a different manner. Similar to the last tip, look for a variety of resources, not just one resource with a variety of instruction methods. Some things to look for: text-heavy resources, video resources, audio resources, and resources to practice new skills.
- Teens are very visual. Look for resources that have an appealing design. Vibrant or contrasting colors, clean and simple, not too cluttered. For digital resources, the design is the cover that can draw teens in or send them running.
- Teens are not children. Overly simplified text or graphics may appear condescending to some teens. Make sure the resources are at their level, and don't be afraid to find resources that will challenge them.

Programming and Resources

Not all teens are going to come to programs. No matter how creative the name, fun the activities, or interactive the program is, there will always be teens who for whatever reason are unable to participate. For these teens, it is important to have a variety of resources that they can use to develop technology skills. Teens are likely to be drawn to different types of resources than adults. Try to find ones that are graphic and fun, but do not sound like they were written for children. Look for resources that go beyond computers to look at tablets, phones, and cameras, as well as different types of programs that these devices use. Books are only a start, and when it comes to technology, can be an inefficient use of funds as technology changes so rapidly. You will also want to find websites, videos, podcasts, and other web-based resources. An advantage to these resources is that they are generally free; you just have to do the work of curating the content in a way that will appeal to teens. You may also find that your library subscribes to one or more databases that provide instruction in computer programs that you can highlight for the teens.

When it comes to programming, it is easy to say that the reason there are no computer skill programs offered to teens is because they do not attend Microsoft Office workshops or setting up e-mail classes. Teens are not passionate about either of these topics, so it is unlikely that they will pursue them on their own time. Instead, find out what your teens are interested in and passionate about. Using a survey, as mentioned before, is one way to find out what your teens are excited about. However, expressed interest on a survey does not always translate into attendance at a program. Take your survey results a step further and bring them to your teen advisory board. If you don't have one established, Teen Tech Week is a great reason to start one! Giving teens the chance to plan and implement the program

Designing a Good Survey

The key to designing a good survey is using the 5 W's (and an H).

Who: Who is your survey targeted at? Keep in mind your target respondents' reading level and attention span. Young kids will do better with shorter words and fewer questions. Try to keep library jargon out (unless you are surveying other librarians). Also, think about the kind of information that the age group is likely to disclose.

What: What do you want to find out? Imagine the survey is over. You are looking through the results and beginning to analyze them. What does the data tell you? Be as specific as possible. Do you want to know how respondents feel about individual library programs? Do you want to know which programs they like best, in comparison to others? Do you want new ideas for programs?

Where: Where will the survey be taken? Will it be handed to patrons of the library when they check out materials, posted on the library's website, or handed out to teens in homeroom? Consider how each location will affect the amount of time respondents are willing to spend on the survey. It is better to get quality answers to a couple questions than get results that mean little to many questions.

When: What is your timeframe for survey completion? Will you post it on the website for a month or ask teachers to have students complete it within a week?

Why: What do you plan to do with the survey results? Why are you asking for these answers? Every question should have a valid reason to exist. If there is a question on the survey that cannot be justified, remove it. If you may need it at a later date, save it for a later survey.

How: This is often the most difficult part, deciding which question type and phrasing will elicit the answers you are looking for. This is also where all the other planning really pays off. Looking at the examples from the "What" section, you can see how different question phrasing will provide different responses. If you want to know about the feelings toward individual programs, a good question would ask for a rating about each program separately, on some standard scale (0 to 7; very unsatisfied to satisfied). To compare programs, which will not tell how someone feels about a program, but how they feel about a program in comparison to another, list all the programs and have the respondent rank them. If you want new ideas, the best option is to ask for an open-ended response, leaving several lines for respondents to fill in their own answer in their own words.

not only gives them a sense of ownership over the event, but also allows them to generate ideas that resonate with their interests and takes a lot of the guesswork out of the process for librarians.

Whether it is game playing, game design, making music, editing photos and videos, writing, or any other interest, there is a need for computers and software. Instead of focusing on the how, show teens the why. Focus on the end result, such as a completed video, instead of the individual skills needed. For example, a program about game design will teach the smaller skills of programming logic, story design, and searching for help online. A program about game design is likely to draw teens in. However, if the program were advertised as "Learn the logic behind computer programs, story design, and how to search for help online," there would probably be less interest from your teen patrons.

There may be instances when it is appropriate to offer more specific, basic classes. However, as with any learning situation, it will go better if the teens are engaged and interested in the material. Finding a topic or method of teaching that is interesting to the teens can be difficult but worthwhile if the teens remember more from the lesson after it is completed. Show them how to use Microsoft Publisher to format a comic book. Let them create resumes for their favorite fictional or historical characters in Microsoft Word or one of its equivalents. When teaching classes about a program that teens may not find interesting, it may help to see if you can teach the class in conjunction with a school, either holding the class at the school or finding if there are teachers who will offer extra credit for attending. Also, contact local homeschooling groups to let them know what classes are being offered, as some parents may want their children to learn skills that they themselves do not possess.

Larger Benefits of Using Technology

The end result of engaging programing for teens is what the teens will be able to give back to society as a whole and to the library. Teens who understand technology will have a better chance at excelling in both school and life. While we do not know what will come next in terms of technology, we can be certain that there will be a next thing. If teens understand the technology available today, they will be better prepared to learn and successfully use the technology of tomorrow.

When the teens at your library fully understand the technology they are using, they can teach other patrons who may also be on the wrong side of the digital divide. This could be seniors and other adults who need more help than library staff can provide, other teens who are struggling to grasp technology, or younger patrons who are just being introduced to technology. YALS