4-H Tech Changemakers

GUIDEBOOK

UNIVERSITY OF GEORGIA EXTENSION
4-H GROWS HERE
Microsoft
National Digital Education EXTENSION TEAM
SRDC

NTRODUCTION

Table of Contents

Introduction

The 4-H Experience

Overview of 4-H Tech Changemakers

Starting a 4-H Tech Changemakers Program

Implementing a 4-H Tech Changemakers Program

4-H Tech Changemakers Lesson Plans and Training Resources

Developing a Plan of Action

Conclusion 33

Appendices 34

About 4-H

In 4-H, we believe in the power of young people. We see that every child has valuable strengths and real influence to improve the world around us. We are America's largest youth development organization—empowering nearly six million young people across the U.S. with the skills to lead for a lifetime.

Learn more about 4-H at www.4-H.org |

National 4-H Council
7100 Connecticut Avenue, NW
Chevy Chase, MD 20815
301-961-2800

About the Partnership

National 4-H Council and Microsoft are working together to close the connectivity gap in rural areas by empowering teens to bring technology and digital skills access to their communities.

4-H Tech Changemakers puts teens at the forefront of creating change in their communities, empowering them to serve as digital ambassadors by equipping them with the tools, resources, and technical partners to help them be successful.

4-H teen leaders engage a broad range of community members and organizations to ensure their projects align with community issues, and to foster relationships that help them meet their goals. Over the course of their projects, 4-H teens:

- Develop community action plans that leverage technology to help solve a community issue.
- Implement their technology trainings with the help of key community stakeholders.
- Evaluate the individual and community impact to refine their ideas and approaches.

About the Partners

Microsoft

Microsoft's mission is to empower every person and every organization on the planet to achieve more. Microsoft believes technology is a powerful force for good and is working to foster a sustainable future where everyone has access to the benefits technology provides and the opportunities it creates.

To learn more about the Microsoft Airband initiative, view the webcast at:
https://news.microsoft.com/rural-broadband/

Visit Microsoft online

Internet Service Providers

Each community participating in 4-H Tech Changemakers will work closely with identified ISPs in their community.

Southern Rural Development Center/National Digital Education Extension Team

The Southern Rural Development Center, one of four Regional Rural Development Centers funded through USDA National Institute of Food and Agriculture, seeks to strengthen the capacity of the region's 30 Land-Grant institutions to address critical contemporary rural development issues impacting the well-being of people and communities in the rural South. The SRDC coordinates the National Digital Education Extension Team (NDEET) made up of Extension professionals and interested partners passionate about digital access issues. NDEET believes Extension can play a unique and significant role in educating communities across the country on the challenges and opportunities of the digital age. NDEET works to identify and generate resources used to increase awareness of broadband opportunities; facilitate community planning to promote broadband access and availability; and assist individuals in adoption and utilization of broadband. In addition, NDEET conducts research to further contribute knowledge and best practices to these efforts.

Visit SRDC online

Visit NDEET online

University of Georgia Extension (Georgia 4-H)

Georgia 4-H, a unit of the University of Georgia Extension, College of Agricultural and Environmental Sciences, helps youth to acquire knowledge, develop life skills, and form attitudes that will enable them to become self-directive and productive members of society. Georgia 4-H sets the stage for youth and adults to learn, grow, and work together as catalysts for positive change. Georgia 4-H serves as the lead state advisor for the 4-H Tech Changemakers.

Visit Georgia 4-H

About the Guidebook

The purpose of this Guidebook is to provide best practices for adult/youth partnerships in implementing 4-H Tech Changemakers in local communities. The Guidebook reflects Microsoft's commitment to computer skills enhancement and 4-H's university-based research, while focusing on the "teens as teachers" model for experiential learning.

This Guidebook was developed by a coaching staff from Microsoft, National 4-H Council, SRDC/NDEET, and Georgia 4-H to provide Extension/4-H educators, volunteers, and teen leaders with basic information needed to plan, implement, and evaluate a local "4-H Tech Changemakers" program. The Guidebook is not a comprehensive curriculum or manual; rather, it provides background information and suggestions for providing educational programming that is relevant and meets community-identified needs.

Contributors include:

Monica Babine, Washington State University
Melanie Biersmith, University of Georgia
Kasey Bozeman, University of Georgia
Sue Chapman, University of Georgia
Jennifer DePasquale, National 4-H Council
Heather Elliott, National 4-H Council
Roberto Gallardo, Purdue University
Janet Golden, National 4-H Council
Gail Huycke, University of Wisconsin
Denise Phelps, National 4-H Council
Kenneth Sherin, South Dakota State University
Yvonne Thomas, Microsoft
Sreedhar Upendram, University of Tennessee
Neal Vines, Virginia Polytechnic Institute and State University
Katherine Spiering, Southern Rural Development Center
Rachel Welborn, Southern Rural Development Center
Terrence Wolfork, Fort Valley State University

THE 4-H EXPERIENCE

The 4-H Experience

Through 4-H, youth build life skills by leading hands-on projects that help them to grow confidence, independence, resilience, and compassion. Adult mentors provide a positive environment where the youth can learn through experiences; they offer guidance and encouragement, ask questions, and share learnings from the experiences. 4-H experiences allow youth to learn by doing, grow from failure, express their ideas, and use their influence to drive positive outcomes. More information on the benefits of the 4-H experience can be found on the 4-H website.

Visit the 4-H website

4-H Essential Elements

The USDA National Institute of Food and Agriculture (NIFA), national headquarters for 4-H, defines the essential elements of a 4-H experience as "…the 'best practices' that help staff and volunteers address the four basic developmental needs of youth - belonging, generosity, independence, and mastery. These elements were derived from the work of the National 4-H Impact Design Implementation Team, who reviewed the basic and applied research on characteristics of effective programs for youth development. From this process, eight elements critical to positive youth development and central to the 4-H experience emerged."

USDA NIFA Essential Elements fact sheet

The National 4-H Curriculum provides opportunities to incorporate the Essential Elements in 4-H learning experiences.

National 4-H Council Essential Elements fact sheet

4-H Tech Changemakers is designed to put the Essential Elements into practice through hands-on learning and digital skills development.

Belonging: "Youth need to know they are cared about by others and feel a sense of connection to others in the group." One of the ways to build a sense of belonging is to create a safe, inclusive environment where youth and adults feel welcomed regardless of their background, beliefs, ideas, and culture. Youth also desire to have a positive relationship with a caring adult. The adults working with 4-H Tech Changemakers need to make sure the youth are seen as equals when it comes to planning, implementing, and evaluating this project. Providing a listening ear and holding young people

accountable for their tasks shows young people that the adult leader cares about them and wants them to succeed.

Independence: "Youth need to know that they are able to influence people and events through decision-making and action." While young people will work collectively to plan their community's 4-H Tech Changemakers program, youth should still be allowed to set personal goals in the process. Youth should have time to reflect upon these goals, determine how they could meet them, and find support networks to help them. One youth may determine that he would like to enhance his organizational skills and wants to help prepare materials and gather photo releases before workshops. Another youth may determine she wants to develop her communication skills with adults and chooses to work with the library's education director to schedule and coordinate the logistics of a meeting at the library's facility.

Mastery: "In order to develop self-confidence youth need to feel and believe they are capable and they must experience success at solving problems and meeting challenges." Mastering a certain skill or subject matter allows an individual to not only be confident with that knowledge but also empowers them to be able to share it with others. While every digital ambassador may not be savvy with every topic being taught, having youth review lessons, practice teaching, and allowing them to find and report back more information about different digital literacy topics will allow the teens to master the information before teaching adult audiences.

Generosity: "Youth need to feel their lives have meaning and purpose." Having the opportunity for youth to give back and serve others in meaningful ways ensures a positive youth development experience. With 4-H Tech Changemakers, teams will collectively decide which audiences (parents, senior citizens, farmers, recent high school graduates, etc.) they want to serve through their workshops, exhibits, meetings, etc. By having the young people develop their own program, they take ownership of this service and can plan their impact for their chosen audience(s).

4-H Tech Changemakers can reflect all four of the Essential Elements as teens learn to become teachers. High-quality content related to digital literacy and Internet safety embedded in a positive youth development structure leads to learning with both content value and an optimal environment to experience new skills.

4-H Program Areas

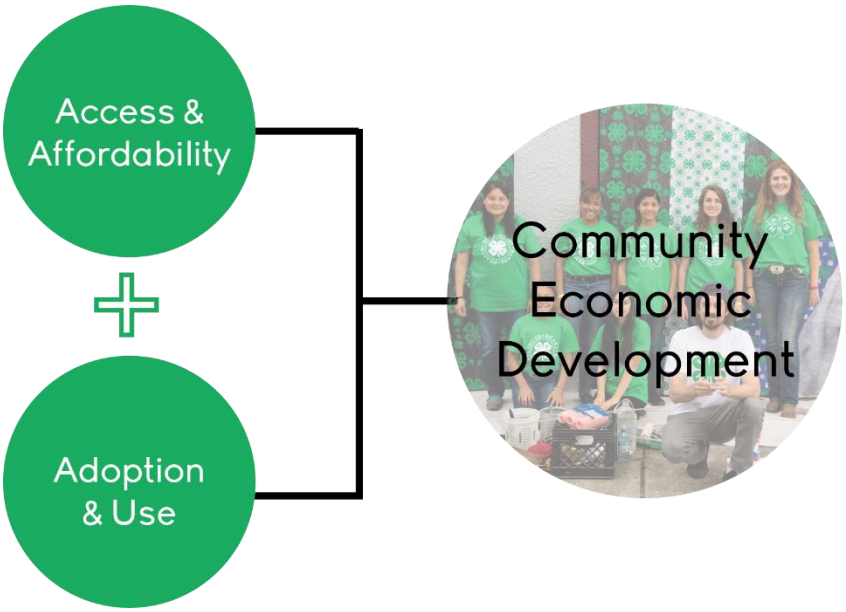
4-H programs in science (STEM and Agriculture), healthy living, and civic engagement are available through local 4-H clubs, 4-H camps, in-school programs, and after-school programs. These programs are supported by a network of 100 public universities and their 4-H professionals and volunteers. 4-H'ers learn through hands-on experiences that build confidence, creativity, and curiosity as well as enhance life skills such as leadership and resiliency.

4-H Tech Changemakers reflects youth development in computer science and technology that ranges from basic digital literacy skills through coding and the importance of those skills and computational thinking to workforce development. The overall goal of this project is to "enable young people and trusted community partners to bring digital skills to their communities, helping everyone confidently participate in today's increasingly digital world." This project is one of many opportunities to enhance the technological skills and abilities of 4-H'ers.

OVERVIEW OF 4-H TECH CHANGEMAKERS

Overview of 4-H Tech Changemakers

For community economic development to take place, broadband infrastructure is but one component. Adoption and effective, safe use are also needed if any community wants to design and deploy an effective and robust digital inclusion strategy.



4-H Tech Changemakers empowers teens as teachers of digital literacy and Internet safety and security, with the goal of increasing the adoption and use of technology by adults in rural communities. The teens are called "digital ambassadors" as they work cooperatively with adult partners to provide needs-driven educational programming in local communities, whether those communities represent a rural census tract within a county or the entire county.

The goals and expected outcomes of 4-H Tech Changemakers are listed below.

1. Empower community members to adopt and use technology to improve their opportunities and outcomes through the use of broadband Internet. Community members will gain technology awareness and skills related to what broadband Internet can provide.
2. Raise the visibility of the partnership and mission as 4-H Tech Changemakers engage with lawmakers, media and other stakeholders. Teen leaders will be trained as spokespeople to lift up and expand youth voice in this critical conversation.
3. Infuse positive youth development approaches in relation to citizenship and technology skills development throughout the life cycle of the project. Teen leaders will successfully engage their local community to solve their digital literacy issues.

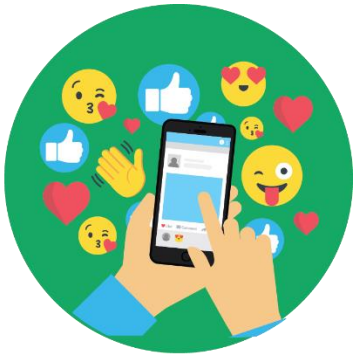
Digital Literacy

Digital Literacy refers to the ability to effectively utilize technology to interact and communicate. It typically encompasses a working knowledge of software and hardware devices as well as a wide range of applications.

4-H Tech Changemakers may be asked to teach Digital Literacy programs that focus on the following goals:

- Using social media
- Comparing different types of devices (computers, tablets, phones, etc.)
- Setting up a smartphone
- Capturing photos and videos
- Understanding various software programs
- Using online shopping and couponing applications
- Using videoconference and online meeting software

Resources to assist in learning more about Digital Literacy can be found in Appendix A.



Internet Safety & Security

Today's Internet has evolved significantly from its simple beginnings. The earliest version of the Internet was launched in the 1960s and has advanced from data transfer over phone lines to sophisticated cloud-based applications.

As the Internet has become more complex, people have become more aware of the need to operate safely and securely online. 4-H Tech Changemakers may be asked to teach Internet Security and Safety programs that focus on these concerns:

- Understanding computer security and privacy
- Protecting computers from viruses, spyware, and other threats
- Protecting the user from threats, scams, phishing, and identity theft
- Keeping the computer secure and updated
- Understanding encryption
- Creating and using strong passwords and locking devices
- Understanding computer ethics
- Preventing cyber-bullying

Resources to assist in learning more about Internet Safety and Security can be found in Appendix A.

Terms & Definitions

A lot of different words are frequently used in discussions of expanding broadband access. A few key terms are below to help you navigate these conversations.

Broadband – Internet access that is always "on" and faster than dial-up. Broadband is typically defined by speed: download at 25 Mbps and upload at 3 Mbps. Different technologies offer different speeds. It is important to note that advertised versus actual speeds may differ. More popular broadband technologies include Digital Subscriber Line (DSL), cable modem, fiber-optic, fixed wireless, satellite, and broadband over power line (BPL). Broadband may be fixed (not moving such as homes, businesses, farms, etc.) or mobile (moving such as mobile devices, sensors, etc.). Fixed broadband typically has higher data limits than mobile broadband. Some common terms associated with broadband include the following:

- **Bits –** essential unit of anything digital is the bit (i.e., 1s and 0s). Speed is measured in bits while storage is measured in bytes.
- **Bytes** – 8 bits
- **Download** – speed that a computer receives data; measured in bits
- **Upload –** speed that a computer sends data; measured in bits
- **Symmetric** – comparable upload/download speeds
- **Middle mile** – network section that connects last mile networks to the backbone of the internet
- **Last mile** – connection between network and home subscriber
- **FTTH** - fiber-to-the-home
- **WISPs** – wireless internet service providers
- **Dark fiber** – laid but not "lit;" left as unused until needed or desired
- **Open access** – the construction and operation of telecommunications infrastructure that is open-access, meaning that all service providers may use the network services at rates, terms, and conditions that are not discriminatory or preferential between providers. Examples of how this separates physical network from the services being made available on an open access network are:
    - Two-layer: municipality builds/owns/operates; ISPs provide service
    - Three-layer: municipality builds/owns; independent party operates; ISPs provide service
- **Spectrum** – radio frequencies allocated to the telecommunications providers and others for communication over the airwaves. Spectrum in the U.S. is regulated by the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA)

Digital Divide – the inequality of access or use of computers and the Internet. Digital Divide Index profiles are available for all U.S. counties (see Appendix B). These indices provide county-level information to gain a greater understanding of the digital divide between urban and rural.

Internet Service Provider – a public agency, private organization, public/private partnership, or co-operative that provides users with direct access to the Internet. ISPs use a range of technologies to connect to their network such as fiber optics, DSL, cable modem, and Wi-Fi.

Rural – non-urban areas. Different typologies are used to define rural areas, including those described by the U.S. Census and USDA. Approximately 19% of the U.S. population live in rural areas, but 72% of the land is considered "rural." In terms of broadband access, the major differences in urban and rural settings are density, topography, and leadership. Density refers to the number of people in a service area. Topography refers to differences in landscape (buildings versus forests, lakes, plains, distances, etc.) When designing a broadband network, these topography characteristics make a huge difference. Leaders refers to the fact that many times, local rural broadband projects are not even discussed due to lack of leadership on the topic. Urban areas tend to have a broader pool of local champions, though this is changing as rural awareness increases.

TV White Space – the unused TV channels between those currently in use in the VHF and UHF spectrum. In 2010, the Federal Communications Commission (FCC) made this unused spectrum available for unlicensed public use. With the appropriate equipment these channels can be used to access broadband Internet connectivity. Microsoft has been a leader in support of the use of TV White Space for internet services around the world. As part of their Airband Initiative, Microsoft is partnering with ISPs, equipment providers, and others to support the use of TV White Space as one of the technology solutions to help offer broadband in rural America.

STARTING A 4-H TECH CHANGEMAKERS PROGRAM

Starting a 4-H Tech Changemakers Program

The following steps are suggested best practices to consider before starting a 4-H Tech Changemakers program in a local community. These practices will be helpful in preparing the 4-H Tech Changemakers team for project planning.

Understanding the Community

Understanding the community where the program will be taking place is an important first step in planning toward the program's success. Knowing some basic demographics about the community such as breakdown by age, education levels, and race/ethnicity can help the team identify relevant partners, make lessons accessible to the community, and provide insights into some possible training needs. One easy to find source for basic information about a community is the USDA Census QuickFacts. You can go to the link below, then put in your state, county, town or zip code in the box at the top. This page will tell you lots of facts about your community including an estimate of houses that have a computer and houses with a broadband Internet subscription. A sample socio-economic index and socio-economic profile can be found in Appendix C. To request a specific index or profile, please email Dr. Sreedhar Upendram (supendra@utk.edu), University of Tennessee Institute of Agriculture and mention that the request is related to the 4-H Tech Changemakers.

View census information

Broadband Access in the Community

Understanding the critical role that broadband access plays and where broadband service is available in the community is another important step in planning for success. In addition to the information on the QuickFacts noted above, Purdue University has developed a set of Digital Divide Indexes to help communities see where they stand. You can access this information on the link below. Also, a sample of the Digital Divide Index is in Appendix B.

View Digital Divide Index

Internet Service Providers (ISP) Identification

There are several resources that can help identify current ISPs in a community. These include contacting the local chambers of commerce or economic development organizations; researching private companies that track and post lists of ISPs online by area; and accessing the FCC online national broadband map https://broadbandmap.fcc.gov/#/ . The FCC site allows the user to search by location

(i.e., address, city, state) and identify providers that report serving an area. The data may not be completely accurate, especially in rural areas, as reporting is at the census block level and the report is based on current service availability or where service could be available without extraordinary commitment of expenses. However, the FCC data does serve as a starting point, offering a list of providers for teams to further explore in the local community.

Verifying Broadband Service Levels

Individuals can verify broadband service for a specific location by conducting an online speed test. Broadband/ISPs often offer a speed test tool and there are several other options such as Speed Test by Ookla or New America's M-Lab Network Diagnostic Tool. To gather broader service availability information in a county, the team may want to develop a short broadband community survey. The survey can be used to identify current subscribers and can include taking a speed test to confirm broadband speeds. It also can ask questions to identify interest in new or expanded broadband service. The Steven County/Spokane Tribe Broadband Action Team Community Survey for High-Speed Internet is provided as an example in Appendix D.

View Speed Test by Ookla

View New America's M-Lab Network Diagnostic Tool

Assessing Community Training Needs

Each community or group within a county will have its own unique training needs. 4-H Tech Changemakers may use a variety of ways to learn about the specific needs in the community. For instance, the team may want to create a survey to ask people about their needs. They could also interview key people in the community that may know of either general needs (such as a library coordinator) or specific needs (such as someone who works with elderly residents). They could also learn about needs by talking to groups of people that may know a lot about the community, such as a civic club, staff at a workforce development agency, or a faith-based group. The team can combine information from different kinds of sources to learn more about the community's needs.

A sample Digital Literacy Interests Survey is provided in Appendix E and a sample Community Stakeholder Interview Questionnaire is provided in Appendix F. Teams can adapt these surveys to meet their needs if they choose to use them.

Getting Acquainted with ISPs

4-H Tech Changemakers are asked to partner with identified ISPs in their community to understand issues affecting access and affordability. The team can partner with these local providers for marketing and training needs. Once ISP partners are identified in the community, connecting with the ISP staff and

determining their interest in being involved in the program will be an important step. A description of the expected roles and action steps for working with ISPs can be found in Appendix G.

Teens Teaching Adults

Technology skills are essential in the workplace and for many everyday tasks. Adults need digital skills to pay bills, check account balances, connect with family, view a school's parent portal, access public benefits, and many other activities. This project encourages teens to reach adults of all ages and stages of life. New technology users may need extra help getting started, while more experienced technology users may only need help with specific tasks or questions. Regardless of age, adults learn best when the training draws on their life experiences, meets an immediate need, is readily applicable, allows for active participation in the learning experience, and is problem-centered. The training team should consider these characteristics when developing the training content and context.

Many older adults may recognize the value of technology and are eager to learn. Important considerations for teens teaching technology to older adults are to differentiate between aging and disability, increase understanding of adult learning styles, and learn specific strategies for teaching adult learners. This foundational knowledge equips teen trainers to be more effective teachers. Teens need an understanding of motivating factors to engage adults in adopting technology as well as some of the barriers for adoption. Some of these barriers may relate to physical changes due to aging or disabilities including low vision, hearing loss, and loss of dexterity. Another common barrier is the significant amount of vocabulary associated with technology that often has different meanings in common usage.

Instructional videos on teaching technology to aging adults can be found at the YouTube links below:

Teach SD: Introduction to Aging

Teach SD: Advanced Teaching Technology

Developing Community Partnerships

Connecting with community partners can greatly benefit 4-H Tech Changemakers. Community partners may be public agencies, private businesses and industries, school systems, nonprofit organizations, utility providers, or civic and community groups. These partners can support and enhance the program by providing additional funding, educational space, equipment and materials, access to target audiences, volunteers, and marketing.

4-H Tech Changemakers will need to identify local partnerships that can support them in the implementation of the program. Thinking about who in each community might have an interest or

reason to care about the project, or may bring additional resources that might be helpful in supporting the community's needs, can help create a list of potential partners. Here are a few questions to help the team brainstorm this list:

- Who might be interested in helping?
- Who might benefit from the training?
- Who does the team need on their side to be successful?
- Who might block their efforts if not included?
- Who might be overlooked by the team?

Once the team has the list of partners, they can begin thinking specifically about how each one is affected by, or might benefit from digital skills training and improved broadband access in the community. For instance, they can think about:

- How are each of those listed above affected?
- Why do they care?
- What are their concerns?
- What are their interests?
- What are they missing that 4-H Tech Changemakers may provide?

Now that the team has a picture of who is in the community and who might be interested in the project, the team is ready to begin inviting partners to join the effort.

By matching community partners' needs and interests to the implementation plan, the team can gain access to the skills and resources they need to be successful while also connecting to what is important to potential partners. For each potential partner, think specifically about what the 4-H Tech Changemakers team needs from them. Equally important, think about how that partner would benefit from being involved. As the team members approach them to ask for their support, be sure to discuss both sides of the partnership. This helps to generate more buy-in from them as they can clearly see their benefit as well as that of the 4-H Tech Changemakers.

For example, a library director may be interested in getting more community members to visit the library (their benefit) while the team may be looking for a space to host learning sessions (4-H Tech Changemakers benefit). When approaching the director, the team may use both angles to make the request. This helps to create win-win partnerships from the beginning.

The conversation between these two might go something like this:

Digital ambassador: Hi, Ms. Jones (library director). Thank you for taking a few minutes to visit with me today. Our team is working on a project to help our community increase digital literacy skills. The project is called 4-H Tech Changemakers. I am interested in talking to you today because I think this project can really help the library and the library can help us. For instance, I know you are always looking for new ways to get the community to visit the library and use its services. Our project needs a place to host classes where there are computers and Internet access. So we think we could work with you to meet your needs and ours by scheduling classes at the library during times when you don't already have something scheduled. Do you think this kind of partnership would be of interest to you?

Ms. Jones: You're right. We are always looking for new opportunities to get people to use the library. This sounds like a potential good partnership. What would you need from me?

Digital ambassador: We are meeting next Tuesday with our potential partners. We would love to have you join us so we can explain the project even more and talk together about our shared interests.

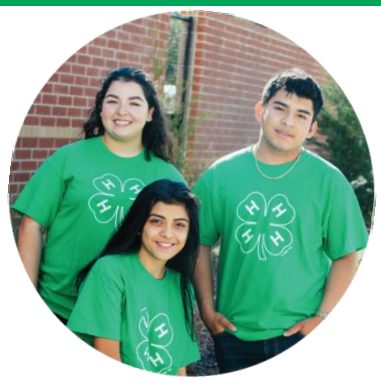
Ms. Jones: Sounds good. I'll plan on coming.

Digital ambassador: Thank you so much! I look forward to talking to you then.

The digital ambassador talked about both the library coordinator's benefit as well as that of the 4-H Tech Changemakers team. That is a great strategy to help get the partner's interest. Getting the support of these partners early in the process is valuable as the teams should involve their partners in planning, preparation, promotion, delivery of training, as well as recognizing and celebrating successes. (See Appendix L, page 62 for a helpful tool in designing a win/win invitation.)

IMPLEMENTING A 4-H TECH CHANGEMAKERS PROGRAM

Implementing a 4-H Tech Changemakers Program



The following steps are suggested best practices to consider for implementing a 4-H Tech Changemakers program in a local community. These practices will be helpful in preparing the 4-H Tech Changemakers team for training delivery and evaluation.

Recruiting and Training 4-H'ers as Teachers

Some 4-H offices may not have a technology program or be working with employers in the area, so recruitment may require reaching out to organizations that aren't typical partners (such as local school districts to identify interested CTE/technology students; businesses that use technology and may have interns; and other local organizations such as Boys and Girls Clubs or afterschool clubs) to secure sufficient team members. These additional members can help with project planning, promotion, one-on-one assistance, and mentoring during training. Additional considerations for recruitment and retention of teen participations can be found in Appendix H.

When training new team members, remember the 4-H experiential learning model: "Explore – Learn – Practice – Experience." The experiential learning process allows youth the time to reflect, a key component to their personal development.

Using Volunteers and Adult Leaders

Finding volunteers and adult leaders from the community is helpful to establish trusted relationships within that community. Teams are encouraged to seek a diverse group of adults (and teens) who share common experiences with the target audience. It is important to consider race and ethnic background, age, gender, language preference, and cultural sensitivities. Given the nature of this project, volunteers could be recruited from STEM-focused businesses and industries, colleges and universities, information technology professions, school systems, and other organizations that emphasize technology and communications.

Volunteers are essential to the 4-H program. They should be recruited, placed, and trained appropriately and treated as an integral part of the team. A 4-H Tech Changemakers volunteer job description might include some of the following duties:

- Assist youth in conducting a needs assessment to determine the training needs in the community.

- Determine interests and abilities of youth in delivering program content.
- Co-coordinate logistics and scheduling for training programs.
- Assist youth in creating a plan of action and determining steps in project management.
- Ensure safety of youth and other adults during training delivery.
- Assist in marketing the training events and activities.
- Identify potential community partners to assist with the project.
- Obtain permission from community partners to use facilities, equipment, staff, etc.
- Recruit, train, and supervise youth in carrying out their assigned tasks.
- Assist youth in developing a budget and securing financial resources to support the project.

Delivery Modes

There are many delivery modes used by local 4-H programs to reach youth and adults. Community 4-H Clubs choose from a variety of 4-H programming options. Project 4-H Clubs often focus on a single content area in depth over a long period of time. 4-H Special Interest (SPIN) Clubs are often small groups that focus on a topic of interest to all members. Other delivery modes that could incorporate 4-H Tech Changemakers include In-School 4-H Clubs, Military 4-H Clubs, 4-H Afterschool Programs, and 4-H Camping. These clubs will be helpful in recruiting teen leaders to participate as 4-H Tech Changemakers and adults to serve as mentors.

The 4-H Tech Changemakers team has flexibility in deciding what types of events work best in their community. Separate workshops, events tagged onto other events, and one-on-one sessions are just a few options that might work. The team should explore opportunities to provide training at county fairs, festivals, and workshops that are sponsored by senior centers, banks, schools, libraries, or other community organizations. Ultimately, the team should determine the best possible delivery mode for their community, goals, learners, etc.

Examples of possible delivery modes could be:

A 4-H Tech Changemakers team decides they want to focus on senior citizen technology use. The group partners with a community senior citizen center, multiple assisted living communities, and nursing home facilities to teach workshops about using computers, tablets, smartphones, etc.

Having a job is important, and a 4-H Tech Changemakers team knows that having computer skills can lead to a good job. The team partners with the local Department of Labor office to offer mini-presentations during lunch hours to patrons. The teens also volunteer in the afternoons to provide one-on-one coaching to people frequenting the office.

A 4-H Tech Changemakers team learns that parents/guardians of children at certain schools are struggling with being digitally literate. These parents are not comfortable sending e-mails, using computer-based school services (like viewing assignments and grades online), or helping their children

complete projects using technology. This team partners with the school's Media Specialist and Parent Involvement Coordinator to host monthly workshops for parents in the evening at the school.

Libraries are a great information hub in a community. A 4-H Tech Changemakers team decides to use their library as the meeting place for different technology-related workshops. These workshops are open to any adult in the community and publicized through the library, Chamber of Commerce, and the local newspaper.

A 4-H Tech Changemakers team realizes that while many young people living on farms are comfortable using technology for agriculture-related duties, adults in their community are not able to use smart devices to check the weather, monitor crop reports, purchase supplies online, or bid on online livestock auctions. This team partners with the local Natural Resources Conservation Service (NRCS), Farm Service Agency (FSA), and Farm Bureau office to teach workshops before agriculture-related events in the community (cattleman's meeting, Farm Bureau annual meeting, harvest festival, etc.). They also decide to create an exhibit about digital literacy for their local county fair.

The health care field uses technology to accomplish a variety of goals. Technology is being incorporated at rapid speeds in the health care field. As a way to educate participants about how to use smart phones, tablets, etc. to monitor and track health and wellness information, a 4-H Tech Changemakers team creates an interactive booth for a local health fair. Additionally, they decide to host some follow-up classes in the community and advertise through local doctors' offices.

Logistics and Scheduling

The section below highlights some important points to consider when conducting training. Considerations related to the logistics of training delivery and working with adult audiences include the following:

- **Timing of events** – The training schedule should consider times that might hinder good local participation (i.e., summer months when students are unavailable and families are on vacation, harvest and planting seasons for communities that are dependent upon agriculture, heavy tourism seasons, or winter when travel can be difficult in some places due to weather conditions). When possible, conduct trainings that leverage events already scheduled by other community entities such as schools, libraries, Extension offices, senior centers, chambers, churches, and other organizations that can help provide easy access to participants.
- **Translation/Interpreters** – Based on the community demographics, providing curriculum and instruction in multiple languages may be needed. Interpreters may be needed for presentations as well as mentoring and one-on-one training.
- **Facilities** – It is beneficial to find workshop sites that have reliable Internet access and computers/devices and are comfortable for residents to visit. Schools, libraries, and community centers may be good locations. However, not all people may be comfortable in these settings.

Some employment sites (e.g., packing facility, large employer cafeteria, or conference room) may be available to host trainings.

- **Transportation** – The location of the facility is important. Consider if teens and workshop attendees are able to drive to the training location. If not, determine options for transportation such as carpooling, securing rides from others, public transportation, or other means. Transportation may be especially challenging in rural areas. Also, consider the availability of parking for those who drive, but may have limited ability to walk great distances.
- **Equity/Inclusion** – Knowing the community demographics and training the project team on how to be inclusive in planning educational delivery is vital. Consider who may be most likely to be left out or be limited in their ability to participate based on the logistics and scheduling. Consider who most needs to participate in the training and how the team can bridge the gap to help meet their needs.
- **Childcare** – Some community members may need childcare services to be able to participate. Teams may consider offering babysitting, possibly in another room at the same facility where the trainings will be conducted.
- **Uniqueness** – Every community has its special or unique attributes and these should be taken into account when planning community engagement events.

Communicating About and Advocating for the Team's Work

Good marketing helps the audience understand what the team is doing, why it is important, and how they can support the effort. Marketing helps build supporters for the work, but the only way to do that is to constantly keep them engaged. The 4-H Tech Changemakers marketing toolkit includes the following information:

- 4-H and Microsoft messaging framework
- Press release template
- Local media alert template
- Event/announcement planning guide
- Social media template
- Impact story writing guide
- Photo guidelines
- Flyers and banners to print
- Marketing Activity Check List

View the Marketing Toolkit

Evaluation and Measuring Impact

National 4-H Council has identified two surveys to be used to measure the success of 4-H Tech Changemakers, as well as the Marketing Toolkit. Refer to Appendix I for a description of the goals, outcomes, indicators and tools used for measuring impact.

- **4-H Tech Changemakers Survey:** The Common Measures survey measures the impact of participating teens who have engaged in six (6) or more hours as a digital ambassador. The survey assesses increased knowledge and interest in technology and community service.
- **Community Learning Session Participant Survey:** This survey of three to five questions administered after the event assesses the event participants' (1) increased confidence in using online tools, (2) increased trust in digital tools and resources, (3) increase in digital skills and competency, (4) desire to continue learning and use of technology tools, and (5) perception of the quality of teens-as-teachers approach.

These surveys may be requested from National 4-H Council.

Sharing the Team's Success

Communicating the impact of 4-H Tech Changemakers with key stakeholders is important for sustainability. One useful tool is the "snapshot," a high quality photo with a descriptive caption that tells the story of how the program is making an impact. Beyond the photo and caption, each snapshot is an opportunity to build out the marketing materials for flyers, social media, and more. The team can use the materials being created on an ongoing basis for the program and repurpose them to be local radio advertisements, Facebook posts, or blog articles for the state 4-H newsletter, for example.

The following are some examples of different kinds of impact:

- **Individual growth** as evidenced by the quiet child who wasn't comfortable on the keyboard suddenly taking charge in front of the class. Questions to determine the impact might be, "I really admired how you just took charge today, how did that make you feel? What difference do you notice in your skills from when you first joined 4-H Tech Changemakers to today?"
- **Connecting people who are isolated** as evidenced by the older woman who didn't know how to message her son sending her first text message. Questions to determine the impact might be, "We are so excited to have you at the class, have you taken a technology class before? Do you have family that live in the area? No, how often do you get to see them? This must make some things really challenging for you; do you get to connect often on the phone or through text message?"
- **Improving workforce skills** as evidenced by farm workers who are excited about gaining new technology skills that allow them to operate more equipment. Questions to determine the impact might be, "How has the technology training helped you with your duties at work? Are you more comfortable using computerized farm equipment? Will your new skills allow you to advance in your current role, or move to another role at work?"

- **Raising community awareness** as evidenced by a school teacher who reaches out to the 4-H Tech Changemakers team to speak to their class. Questions to determine the impact might be, "How did you hear about our 4-H program? Were you aware of the low rates of technology access in the area before this? What inspired you to invite us into your class?"

Communicating the impact is an important tool in insuring future funding and continued support of the project in the local community.

4-H TECH CHANGEMAKERS LESSON PLANS & TRAINING RESOURCES

4-H Tech Changemakers Lesson Plans & Training Resources

The training team has flexibility in the selection of lesson plans based on the community's identified learning needs.

Resource List

Resources for developing lessons, activities, and other training content can be found in Appendix A.

"Grab & Go" Sample Lesson Plans

Ten sample lesson plans based on a variety of content themes will be available on the University of Georgia website. These lesson plans address general Digital Literacy and Internet Security topics and can be used to jumpstart 4-H Tech Changemakers while specific community training needs are being identified. A sample lesson plan can be found in Appendix J. The content themes presented in the lesson plans are listed below.

1. **Communication**

   Interacting with people online can be a great way to communicate. A lesson about communication could help adult learners determine best strategies for digital communication, identify resources for digital communication, and ensure safety while communicating online.

2. **Computer Applications**

   Knowing how to use basic computer applications can allow an individual to create documents, use calculation devices, or even browse the Internet. A lesson about computer applications could introduce adult learners to essential computer functions, such as word processing, photo browsing, alarm/clock settings, mathematic calculations, and using the Internet.

3. **Information Literacy**

   An information-literate person can identify, find, evaluate, and use information effectively. A lesson about information literacy could help adult learners identify the process of assessing the quality, credibility, and validity of websites and how to use search strategies to find digital information.

4. **Netiquette**

   Netiquette is the accepted rules of Internet behavior – the do's and don'ts. A lesson about netiquette could help adult learners respect the rights of other Internet users by properly interacting with them in e-mails, forums, blogs, and social networking sites.

5. Online Shopping

Purchasing goods online can be convenient, but doing it safety and effectively is paramount. A lesson about online shopping could help adult learners identify secure ways to shop online, practice online shopping, and report fraudulent online shopping scams.

6. Parental Roles

Being the parent or guardian of a young person using the Internet and smart devices can be stressful. A parent's role must include child supervision, but the parent must have the necessary background information to provide the oversight that is needed. A lesson about parental roles could help adult learners identify ways to set parental controls and screen time limits, know about secret apps and ways apps can collect user data, and review materials before youth use the resource.

7. Privacy and Security

Having strategies for managing personal information and keeping it secure from online risks such as identity thieves and phishing is important. A lesson about privacy and security could help adult learners create strong passwords, identify ways to avoid scams, and analyze privacy policies.

8. Smart Devices

Smart devices (like phones and tablets) can easily unite people and help the user complete a variety of tasks. But without the skills, many people do not use the device to its full capacity. A lesson about smart devices could help adult learners communicate with the device (via phone call, text message, video-chat, etc.), understand how to use basic applications, and know valuable safety information.

9. Social Media & Gaming

While a photo challenge or personality quiz may seem fun, social media and online games can pose a variety of safety risks, including identity theft and the spreading of malware. A lesson about social media and gaming could help adult learners better understand different social media platforms and games, how to safely use them, and how to avoid common scams and gimmicks with these sites.

10. Workforce Development

Having the skills to search and apply for jobs online, create and upload resumes, and complete job-related documents enable an individual to enter the workforce. A lesson about workforce development could help adult learners use career-related search engines, develop the skills to complete online applications, and create resumes and other documents related to the job application process.

Equipment and Supplies

Training teams will need a variety of electronic devices (e.g., smartphones, tablets, laptop computers, etc.) to support the experiential learning model. Program participants can be encouraged to "bring your own technology" (BYOT), but some may not have devices readily available.

Facilities such as libraries, community centers, schools, college/university labs, and Extension offices, may allow the training teams to use their devices as well as training space. Reliable Internet connectivity will be essential, regardless of the device or location.

Program participants may find it useful to have prepared handouts that include reminders from the training that they can use for reference at a later time. Most of the lesson plans and training resources listed in this Guidebook include sample handout materials.

DEVELOPING A PLAN OF ACTION

Developing a Plan of Action

State Level Planning

The steps needed to coordinate a project on a state level will look very different from those needed on a local or county level. For instance, if a state has several counties implementing the project at the same time, some attention needs to be given to coordinating of efforts. For those state leaders, attention needs to be given to three major tasks. Each of these are briefly described below:

- **Preparing for training events to prepare county teams** – Each county involved in the project needs to have local leadership made up of adults and youth working side-by-side. This local team will be instrumental in recruiting other teens, finding local partners, and identifying local needs as well as crafting appropriate responses to those needs. On the state level, the project leader will need to recruit that initial team to lead the effort on the local level.
- **Communicating with key state or regional stakeholders** – Stakeholders that serve a state or regional (multi-county) area may be great supporters of the overall efforts. It is appropriate for the project leader to identify and reach out to these stakeholders to help provide overarching support to the state efforts.
- **Managing administrative responsibilities** – These might include managing a state budget, aggregating impact data, and communicating with funders.

State leaders may have other tasks that are important to their work, but most states will find these three "buckets" of efforts to be important. Thus, thinking through the step-by-step actions that need to take place in each of these will strengthen efforts. Consider each step that is needed, who will be responsible for each step, and when the step needs to be finished. Also, documenting completed steps can help everyone keep track of progress. A Project Management Plan template is provided in Appendix J to help leaders organize the work.

Local/County Planning

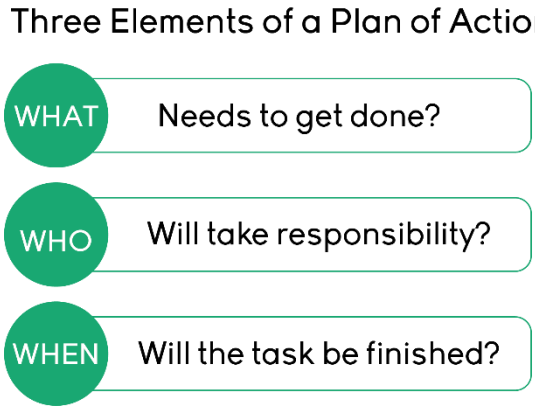
Local or county level planning hones in a number of important details to get the work moving forward. Each local/county group should consider these questions as they develop their plans:

- What are the digital challenges our community faces now?
- Who in our community might need help with digital skills?
- How will we assess community digital skills needs? Who will we ask?
- What do we hope is better in the future as a result of this effort?
- What partners might be willing to help, and how will their partnership benefit their work as well as ours?
- Who is the Internet Service Provider in our area and how can we involve them in the process?
- What steps do we need to take, who will be responsible, and what is the timeline for each step?

This guidebook provides details on each of those questions in the previous pages. Just as state level planning has major action steps to consider, so does county/local planning. Five major tasks are appropriate for the local/county efforts:

- **Building the local training team** – The core county team will be responsible for recruiting other teens to be part of the local training team. They will also need to work with these newly recruited teens to ensure they understand the project goals and have access to the training lessons and materials they need to be successful.
- **Getting local partners on board** – Local partners will be needed to help make this project a success. So giving attention to identifying and inviting these partners will need focused attention.
- **Planning the teaching sessions** – This is the core of the project efforts and involves deciding what lessons meet local needs, where the sessions can be held, and when to hold them.
- **Marketing the effort** – All great work deserves recognition. This starts from the first stage of announcing the opportunity to the public and continues on to documenting and celebrating results. Planning for these different phases is an important part of local efforts.
- **Connecting to the local ISP** – Specifically for counties involved in the Microsoft pilot, connections to these valued partners will be provided in the process. As teams learn who to contact, thinking through how the team will frame their connections is an important part of the planning process.

Now that the team has a basic understanding of the project work, it's time to get down to planning the action moving forward. This is a key step as it helps determine responsibility, initial tasks and timelines. Ideally, the team will walk through this process with its partners to help encourage their buy-in to the work and allow them the opportunity to contribute in meaningful ways. If someone's help is needed for the plan of action that isn't present to volunteer, then an action step needs to be that someone will contact them to gain their support.



Three basic elements make up a strong Plan of Action:

1. **Specific steps that need to be taken** – What steps would need to be taken to help move from where the team is now to the point where the team is launching their program? Break the steps into manageable 'bites' and arrange the bites into a logical order.
2. **A person who will take leadership for each of the steps** – The team cannot move forward if they have an 'unclaimed' step. Steps should be shared evenly among the partners so the load is not shouldered by just a few people. Also, avoid assigning steps to 'all team members' unless it is a task that everyone really must have a role in carrying. The old saying applies here, 'Everyone's job is nobody's job.' If a step does need to be shared among more than one person, ask for a 'lead' to help keep the step on track.

3. **A realistic timetable for completing each step** – Keeping things rolling is vital! Having a timeline for when steps will be completed is very important. Avoid assigning deadlines when possible. Instead, ask each person who takes ownership of a task when they can realistically complete the step. This accomplishes a few worthy goals. First, it enhances the individual's buy-in to the timetable. If someone makes a commitment to complete a task by a certain date, it carries much more weight with them than if they are assigned an arbitrary date that does not take into account their other obligations or constraints. Second, it can help identify potential roadblocks or stumbling points. For instance, suppose a person accepting a step indicates they cannot complete the step until two months from now. Other steps are now 'on hold' for completion of that step. If the two-month delay will threaten forward movement, it may be a good idea to either negotiate the date with the person, or see if someone else would be willing to take on the step within a shorter timeline

A Community Plan of Action template is included in Appendix L to help you organize all of these details into a single document.

CONCLUSION

This Guidebook provides an overview for starting and implementing 4-H Tech Changemakers. It is not an exhaustive or prescriptive resource for specific community programs; rather, it serves as a general guide to generate ideas for 4-H educators, volunteers, and teen leaders. With various 4-H delivery modes in each state and county, not all of the best practices provided in the Guidebook may be appropriate. Each community team will implement the program differently based on their specific circumstances. Additional coaching and resources are available from the partners and contributors listed in the Guidebook.

Appendices

Resource List

This list includes links to trusted online sources as well as a list of main topics covered in each resource.

Digital Literacy Resources

Common Sense Media https://www.commonsensemedia.org/

- Internet Safety, Cyberbullying, Email, Internet Browsing, Digital Footprint

GCF Learn Free https://edu.gcfglobal.org/en/subjects/tech/

- Microsoft Office, Computer Basics, Email Basics, Internet Basics, Online Safety, Social Media

Intel Education: The Journey Inside https://www.intel.com/content/www/us/en/education/k12/the-journey-inside/explore-the-curriculum.html

- Computer Basics, Internet Basics, Technological Advances

Learn My Way https://www.learnmyway.com/subjects

- Using your Computer, Online Basics, Social Media, Online Safety, Finding a Job, Improving your Health, Managing your Money, Public Services

Microsoft Digital Literacy https://www.microsoft.com/en-us/digitalliteracy/curriculum4.aspx

- Computer Basics, Internet & the Cloud, Productivity, Computer Security, Photo & Video Skills

Operation: Military Kids Tech Discovery Curriculum https://4-hmilitarypartnerships.org/military-liaisons/resources/curriculum/tech_discovery.html

- Youth Centered Activities, Social Media, Mapping Tools

Purdue Extension https://extension.purdue.edu/hamilton/article/30677

- Social media

Tech Boomers https://techboomers.com/

- Social Media, Shopping Online, Online Entertainment, Useful Websites & Apps, Internet Basics, Internet Safety

Teens Teaching Tech
https://fyi.extension.wisc.edu/wi4hcitizenship/files/2018/01/AARP_MentorUp_GuideBook_FINAL.pdf

- Tech 101, Using Mobile Devices, Social Media, Photo & Video, Online Safety & Privacy

Additional Internet Safety and Security Resources

All of the above resources, with the exception of the Operation: Military Kids Tech Discovery Curriculum, include sections about Internet safety and security. For additional resources on this topic, see below.

ConnectSafely https://www.connectsafely.org/seniors/

- Communicating Online, Password Tips, Online Scams, Online Shopping, Online Banking, Online Health Services

Department of Homeland Security https://www.dhs.gov/stopthinkconnect-toolkit

- Password Tips, Internet Scams, Social Media, Online Banking, Online Gaming

Federal Trade Commission https://www.consumer.ftc.gov/topics/privacy-identity-online-security

- Protecting Kids Online, Identity Theft, Online Scams

Microsoft Digital Skills https://www.microsoft.com/en-us/digital-skills/online-safety-resources

- Protecting your Computer, Cyberbullying, Mobile Device Safety, Social Media

APPENDIX B

COMMUNITY PROFILES

Digital Divide Index

The Digital Divide Index was developed by the Purdue Center for Regional Development as a pragmatic tool to jumpstart local conversations around the digital divide. The DDI is made up of two indicators: an infrastructure/adoption indicator and a socioeconomic indicator. Both of these are then used to calculate an overall DDI score, which ranges from 0 to 100, where a higher number denotes a higher digital divide.

The reason to include both the socioeconomic and the infrastructure/adoption scores on the profile in addition to the overall DDI score is to help guide local efforts given limited resources. For example, if the socioeconomic score is much higher than the infrastructure/adoption score, efforts should be made to increase awareness of the technology's relevance and benefits as well as digital literacy and skills. If, on the other hand, the infrastructure/adoption score is much higher than the socioeconomic score, efforts should be made to improve and/or deploy local broadband infrastructure.

Please note that this tool was designed to jumpstart conversations. Some of the underlying data used to construct the DDI is known to have issues but is the only data available for the nation. For more information on the methodology, please visit pcrd.purdue.edu/ddi. To request a specific DDI profile, please email Dr. Roberto Gallardo (robertog@purdue.edu) and mention that the request is related to the 4H Digital Ambassadors program.

2017 DIGITAL DIVIDE PROFILE

40.07
Digital Divide Index Score

Accomack, Virginia

The digital divide index score (DDI) ranges between 0 and 100, where a lower score indicates a lower divide. The infrastructure adoption score and the socioeconomic score both in a 0 to 100 range as well contribute to the overall DDI. Listed below each score are the indicators used.

27.62

Infrastructure/Adoption Score

If this score is much higher than the socioeconomic score, efforts should be made to upgrade the broadband infrastructure.

0.0%
of people without access to fixed broadband of at least 25 Mbps down and 3 Mbps up

30.0%
of households with no internet access

22.3%
of households without a computing device

698.481
average maximum advertised download speed in Mbps

656.668
average maximum advertised upload speed in Mbps

47.63

Socioeconomic Score

If this score is much higher than the infrastructure/adoption score, efforts should be made to focus on digital literacy and exposing residents to the benefits of the technology.

21.4%
population ages 65 and older

17.8%
ages 25 and older with less than a high school degree

19.8%
of individuals in poverty

12.0%
noninstitutionalized civilian population with a disability

4-H GROWS HERE | Microsoft | PURDUE UNIVERSITY | Extension COMMUNITY DEVELOPMENT

Source: FCC Form 477; 2013-2017 ACS For more information, contact Dr. Roberto Gallardo at (765) 494-7273 or robertog@purdue.edu Twitter: @robertoge or @pcrd

2017 Socio-Economic Data Index

Accomack, Virginia

Change in Population (2010-2017)

County	State
-3.6%	4.6%

Unemployment Rate

County	State
5.4%	5.5%

Median Age

County	State
46	38

Change in Median Age in years (2010-2017)

County	State
2.1	0.8

Poverty Level

County	State
17.1%	11.2%

Food Stamps

County	State
14.8%	9.1%

Median Household Income

County	State
$42,260	$68,766

Change in Median Household Income (2010-2017)*

County	State
2.1%	12%

*Rates not adjusted for inflation

4-H GROWS HERE | Microsoft | UTEXTENSION INSTITUTE OF AGRICULTURE THE UNIVERSITY OF TENNESSEE

For more information, contact Dr. Sreedhar Upendram at (865) 974-7410 or supendra@utk.edu

	Select County	Select State	Relative Trend	-2 STDEV -1 STDEV State +1 STDEV +2STDEV
	Accomack County	Virginia		
Change in Population (2010-2017)	-3.6%	4.6%	Losing population	
Poverty Level (2017)	17.1%	11.2%	Poverty rate significantly higher than state average	
Unemployment Rate (2017)	5.4%	5.5%	Lower than state average	
Food Stamps (2017)	14.8%	9.1%	Above average reliance	
Median Age (2017)	46	38	Older than state average	
Change in Median Age in years (2010-2017)	2.1	0.8	Significant increase in median age	
Median Household Income 2017 (MHI)	$42,260	$68,766	Very low MHI	
Change in Median Household Income (2010-2017)*	2.1%	12.0%	Significantly below average change	

Data Sources: 2006-2010 and 2013-2017 American Community Survey 5-year Estimates, U.S. Census Bureau

* Median household income in 2010, 2017 dollars and are not adjusted for inflation

APPENDIX C

TOOLS FOR ASSESSING NEEDS

Stevens County / Spokane Tribe Broadband ACTION TEAM

WASHINGTON STATE UNIVERSITY EXTENSION

Survey closes on January 31, 2019

COMMUNITY SURVEY for High-Speed Internet

Many rural parts of Stevens County and the Spokane Indian Reservation do not have adequate internet service. Data about internet availability is not accurate. This survey does not guarantee new internet service. It is being used to gather internet access data. Results may assist in determining actual service availability. Results may also provide information to show potential future funders and internet service providers that there is a need for access to affordable internet.

We know that having access to the internet is important for education, health care, business, public safety and much more. We also know that there are limited internet access options in our region. The Stevens County/Spokane Tribe Broadband Action Team (BAT) wants to help! This survey is designed to determine what internet services are available in your community, whether you have internet in your home, how you use it and the barriers to obtaining adequate service.

Your participation in this survey is voluntary, and all responses will remain confidential. Your candid answers will provide valuable information to the BAT, led by Washington State University Extension. We hope to use the information to improve Internet access in the region. Be sure to do the speed test to help us accurately map our region's broadband.

This survey can be completed online at: https://tinyurl.com/WSUBroadbandSurveyStevens

Or fill this out and mail it to:

WSU Extension – BAT Community Survey
986 S. Main, Ste. D
Colville, WA 99114.

Do you have questions, comments or need technical assistance?
Contact Bert Klimas --- (509) 738-6876 --- bertinrice@hughes.net

The Stevens County /Spokane Tribe Broadband Action Team (BAT) is a group of elected officials, schools, libraries, agencies, businesses and community members trying to discover ways to increase access and use of the internet. WSU Stevens County Extension serves as the facilitator for the group.

Visit the website for more information about our BAT activities and local free WIFI spots:
http://extension.wsu.edu/stevens/broadband-action-team/

WASHINGTON STATE UNIVERSITY EXTENSION

This study has been reviewed and deemed exempt from further review by the WSU Institutional Review Board (IRB). This survey meets all the university's requirements for the protection of respondent privacy and confidentiality. If you have any questions regarding your rights as a participant you can contact the co-investigators: Monica Babine at babinem@wsu.edu, or Debra Hansen at debra.hansen@wsu.edu

If you do have internet, could you please take a speed test at this site:

https://stevenscountybroadband.net and record your results below.

Click on the speed test link to take the test. If the test fails or provides an error message please note that information in the comments section.

Download Mbps: _____ and Upload Mbps: _____

Comments: _____

1. If you do **not have internet access** at your home**, please skip to question 5.**

   Approximately how much does your household currently pay each month for these services? (Select all that apply and **enter the dollar amount**.) If you don't know, write that in the "Other" space.

   $_____ Dial-up using a phone modem
   $_____ Satellite connection
   $_____ DSL-enabled phone line
   $_____ Cable modem
   $_____ Fiber to the home
   $_____ Wireless/microwave
   $_____ Wi-Fi hotspot(s)/wireless mobile card(s)
   $_____ Cell phone(s)
   $_____ Other _____
   $_____ It's bundled with phone and/or TV

2. Who is your current Internet Service Provider (ISP)? (Please check all that apply.)

   ☐ Adept LLP (Seymour Channels)
   ☐ Air-Pipe (Wired or Wireless – WOW)
   ☐ AT&T
   ☐ CenturyLink
   ☐ Comcast
   ☐ Dash Wireless
   ☐ EcliptixNet
   ☐ Eltopia
   ☐ Fatbeam
   ☐ HughesNet
   ☐ Internet Xpress (Desert Winds)
   ☐ NCI Datacom
   ☐ Odessa Office Equipment
   ☐ Pend Oreille Valley Network (POVN)
   ☐ Ptera
   ☐ Spectrum (Charter)
   ☐ Sprint
   ☐ StarTouch
   ☐ STTX (Spokane Tribal Telecom Exchange)
   ☐ Verizon
   ☐ Wild Blue
   ☐ Other _____

3. How satisfied or dissatisfied are you with the following aspects of your internet service?

	Satisfied	Neutral	Dissatisfied	Not Applicable
Price	☐	☐	☐	☐
Reliability	☐	☐	☐	☐
Speed	☐	☐	☐	☐
Data caps/limits	☐	☐	☐	☐
Customer Service (i.e., billing)	☐	☐	☐	☐
Technical Support	☐	☐	☐	☐
Overall Satisfaction	☐	☐	☐	☐

4. Please indicate which of the following internet connected devices are in use in your household. Indicate the number of each:

#____ Computers or laptops
#____ Tablets (i.e., iPads, Kindles)
#____ Smart phones
#____ Smart appliances (internet enabled)
#____ Game consoles
#____ Internet enabled TV
#____ Other: _____

5. How does (or how would) internet service benefit you at home? Select your top five.

Use Now	Would Use	
☐	☐	Email, instant messaging, other forms of communication
☐	☐	Operation of a business
☐	☐	Work at home for an employer
☐	☐	Emergency notifications or disaster monitoring
☐	☐	Video chat or video conference
☐	☐	Stream movies or music
☐	☐	Access health care information, internet banking, job applications, other essentials
☐	☐	Distance learning (i.e., K-12, higher education)
☐	☐	Homework
☐	☐	Online gaming (i.e., Fortnite, Lego Creator Island, Wii)
☐	☐	Blogs, online journals/essays, or personal web pages
☐	☐	Social media (i.e., Facebook, Instagram, Snapchat, Twitter)
☐	☐	"Passing time" or just "surfing the web"
☐	☐	Download apps/update computers
☐	☐	Other _____

6. If you **have** internet in your home, **please skip to question 7**.
   If you **do not have** internet service in your home please tell us why. (Check all that apply.)

   ____ Too expensive
   ____ Not available in my community/area
   ____ I do not have a computer
   ____ My computer is too old
   ____ I do not know how to use a computer
   ____ I do not know how to get internet service
   ____ I do not need it/not interested in it
   ____ Have physical limitations (i.e., eyesight/disability)
   ____ Worried about others getting access to my personal information
   ____ I do not need more than publicly available internet use (library, restaurants, etc.)
   ____ Other _____

7. If a new or alternative high-speed Internet service was available to your home, would you be interested in acquiring it?
   - ☐ Yes
   - ☐ No (**If no, please skip to question 9.**)

8. What is the maximum you would be willing to pay per month for an internet service that meets your needs? (Please select only one.)
   - ☐ Less than $20
   - ☐ $20-29
   - ☐ $30-39
   - ☐ $40-49
   - ☐ $50-59
   - ☐ $60-69
   - ☐ $70-79
   - ☐ If willing to pay more, please state the highest amount you would pay per month _____

9. What community do you live in?

___ Addy/Arden
___ Barstow
___ Boyds
___ Cedonia/Hunters
___ Chewelah
___ Colville
___ Deep Lake
___ Evans
___ Ford
___ Kettle Falls
___ Little Pend Oreille Lakes
___ Loon Lake
___ Marcus
___ Northport
___ Onion Creek
___ Orient
___ Park Rapids
___ Rice/Daisy/Gifford
___ Springdale
___ TumTum/Lake Spokane
___ Valley/Waitts Lake
___ Wellpinit
___ Westend Spokane Reservation
___ Other _____

10. **OPTIONAL:** Would you (or your company) be interested in contributing to broadband expansion in our area through:

____ Use of a high point or tall structure on your land for a tower

____ "Boots on the ground" outreach help – doorbelling, etc.

____ Technology services like mapping, social media promotion, internet testing, computer tune-ups and gadget configuration

____ Free advertising like yard signs, radio spots, newspaper ads/articles, etc.

____ Professional services like legal advice, engineering, etc.

____ Other _____

If you would like to discuss any of these options, please provide your contact information:

☐ Possibly (please provide name and preferred contact information – phone or email.)

_____

☐ No

The next few questions cover demographics. This information is requested in order to help make sure that all people in your community are represented in this survey. It may also assist us as we seek funding to expand broadband.

11. Which group do you most closely identify yourself with (Please check all that apply.)
    - ☐ American Indian or Alaskan Native
    - ☐ Asian
    - ☐ Black of African American
    - ☐ Hispanic/Latino
    - ☐ Native Hawaiian or other Pacific Islander
    - ☐ White
    - ☐ Other _____

12. Please indicate how many of each (youth and adults) are living in your household:
    - ____ Youth
    - ____ Adults

13. Are you a Veteran?
    - ☐ Yes
    - ☐ No

14. Any other comments or suggestions?

_____

_____

_____

_____

_____

_____

_____

_____

Thank you for taking the time to complete this survey!

Your input is sincerely appreciated!

Digital Literacy Interests Survey

Sample language to introduce the survey: [COUNTY NAME] 4-H is participating in 4-H Tech Changemakers, to offer training to help increase the comfort level of adults in the community around technology. To help us determine what to offer in our workshops we need your help. We are interested in how you currently use Internet services in your life and also for what purposes you would be interested in growing your skills.

Instructions: Please place an X beside the skills you already use from the list below, then place an X beside the skills you would like to improve. Finally, in the right-hand column, place an X beside the 5 skills you would most like to learn.

Use Now	Would Like to Improve	Skills to accomplish the following purposes	What are the 5 skills you would most like to learn?
		Communicating through e-mail or instant messaging	
		Starting, running or expanding a business	
		Working at home as part of my job	
		Video chatting or video conferencing	
		Streaming movies or music	
		Accessing health care information or services	
		Conducting banking or investment transactions	
		Expanding my education through distance learning	
		Doing my homework	
		Playing games online	
		Creating online content to share (blog, YouTube, online journal, or personal web page	
		Using social media (such as Facebook, Instagram, Snapchat, Twitter)	
		Browse the web (check, news, sports, learn about community events, etc.)	
		Downloading apps or updates for my digital devices (computer, tablet, smartphone)	
		Joining social, political, religious, or recreational groups	

		Searching for or applying for jobs	
		Connecting with friends and family that live in different communities	
		Contacting elected official or news outlets to express my opinion	
		Buying goods or services	
		Selling goods or services	
		Managing or sharing files (OneDrive, Google Drive, Dropbox)	
		Managing wearables (Fitbit, Apple watch, etc.)	
		Managing "smart home" devices (light switches, thermostat, cameras, etc.)	
		Participating in crowdfunding or crowdsourcing campaign	
		Programming (app development, coding, etc.)	
		Other uses:	

Do you currently have Internet at home? _____Yes _____No ____ Not sure

Which of these devices do you own (Check all that apply)?
____ Computer/laptop
____ Smart Phone
____ Tablet

Sample Closing:
If you would like additional information about 4-H Tech Changemakers please contact [PERSON'S NAME] at [PHONE/EMAIL.]

Thank you for taking the time to complete this survey.

SOURCES:
Stevens County/Spokane Tribe Broadband Action Team led by Washington State University Extension

Gallardo, R., and Wiltse., M (2018). Gauging Household Digital Readiness. Purdue Center for Regional Development and Purdue Extension's Community Development Program. Purdue University. Available at: https://pcrd.purdue.edu/files/media/gauging-household-digital-readiness.pdf

Sample Community Stakeholder Interview Questions:

Sample Introduction to the Interview: [COUNTY NAME] 4-H is participating in 4-H Tech Changemakers, to offer training to help increase the comfort level of adults in the community around technology. To help us plan this project we would appreciate your answers to the following questions.

Sample Questions:

1. What are some good things happening in our community right now that would be even better if people had stronger digital skills?

2. What are problems or issues facing our community that improving digital skills might help to address?

3. What people or groups do you think could most benefit from having improved digital skills?

    a. What might be some reasons they would like to participate?

    b. What might be some challenges to their participation?

4. If you had the opportunity to improve your digital skills would you take advantage of it? Why or why not?

5. What are the five most important digital skills this community should build? (Note: You can provide the skills list from the 4-H Tech Changemakers Digital Literacy Interest Survey to help give ideas.)

If you have questions about 4-H Tech Changemakers, please contact [PERSON'S NAME] at [PHONE/EMAIL.]

Thank you for taking the time to participate in this interview.

SOURCES:

Gallardo, R., and Wiltse., M (2018). Gauging Household Digital Readiness. Purdue Center for Regional Development and Purdue Extension's Community Development Program. Purdue University. Available at: https://pcrd.purdue.edu/files/media/gauging-household-digital-readiness.pdf

Washington State University Microsoft 4-H Tech Changemakers, Quincy, Washington. (2018).

APPENDIX D

4-H & ISP PARTNERSHIP

4-H and ISP Roles

Level of Engagement	Role of local 4-H	Role of local ISP
High 4-H and the ISP are bringing their respective expertise together to jointly help the community gain access to and build skills	• Bring digital skills resources to local communities • Provide training/skills opportunities to communities • Provide training/skill building to 4-H youth to be ready to train their community • Scheduling of training/skills opportunities • Determine location for training in local communities • Co-lead on marketing and awareness of training opportunities to both Airband customers and the broader community • Co-lead on local storytelling to local media	• Suggest digital skills resources they have that could be of help • Suggest locations and opportunities where 4-H training may be relevant in local communities • Co-lead on marketing and awareness of training opportunities to both Airband customers and the broader community • Co-lead on local storytelling to local media • Where relevant, employees may engage in helping setup and/or deliver skills training in some cases
Medium The ISP is helping in specific instances as 4-H works to help the community gain access to and build skills	• Determine and bring digital skills resources to local communities • Provide training/skills opportunities to communities • Provide training/skill building to 4H youth to be ready to train their community • Scheduling of training/skills opportunities • Determine location for training in local communities • Co-lead on marketing and awareness of training opportunities to both Airband customers and the broader community • Lead on local storytelling to local media	• Suggest digital skills resources they have that could be of help • Suggest locations and opportunities where 4-H training may be relevant in local communities • Co-lead on marketing and awareness of training opportunities to both Airband customers and the broader community
Low The ISP is engaged in limited ways where they have ability and capacity.	• Determine and bring digital skills resources to local communities • Provide training/skills opportunities to communities • Provide training/skill building to 4H youth to be ready to train their community • Scheduling of training/skills opportunities • Determine location for training in local communities • Co-lead on marketing and awareness of training opportunities to both Airband customers and the broader community • Lead on local storytelling to local media	• Suggest locations and opportunities where 4-H training may be relevant in local communities • Assist in marketing and awareness of training opportunities to both Airband customers and the broader community

Action Steps for ISP Partnerships

<u>Please note</u>: Participants of 4-H Tech Changemakers should only partner with their designated Internet Service Provider (ISP). Representatives from Microsoft and National 4-H Council will coordinate meetings between the 4-H Tech Changemakers teams and the ISP.

1. During the training session, Microsoft representatives will provide information about partnering with Internet Service Providers, including their roles and expectations. Teams will include steps to engage with ISPs in their plan of action.

2. Within a few weeks of each training session, Microsoft will send an email to the county 4-H contact, copying the state-level Principal Investigator, introducing them to their ISP contact. Ideally, a meeting (virtual or in person) with the ISP should occur within 30 days following the introduction. Microsoft and National 4-H Council will work with each county to set up the meeting. Microsoft and Council representatives will attend each meeting by phone/Zoom whether meeting is virtual or in person.

3. Georgia 4-H will provide a coaching e-mail and/or phone call, following the ISP introduction, to counties with basic information about working with their ISP, including tips for an effective initial partnership meeting by phone or in person. Helpful information for working with ISPs can be found on page 16 and in Appendix G in the Guidebook. Counties will report on the status of their relationship with the ISP in their Plan of Action reports as outlined in the work agreement. The first report is due April 1, 2019.

4-H ISP Discussion Guide

Thank you for taking the time to talk with our 4-H Tech Changemakers team. We would like to share information about our team and project plans, learn about your business and how you would like to be involved in this project.

1. Our 4-H team includes:

   _____

   _____

2. Please introduce your ISP staff

   _____

   _____

3. We have identified the following project plans:

   _____

   _____

4. To help us better understand your company we have a few questions:
   a. Where do you currently provide service in our county?
   b. What services do you offer in our county?
   c. Are there areas in the county that you plan to provide or expand service?
   d. How many staff do you have in the county?
   e. What challenges are there to providing internet services in our county?
   f. What gaps in awareness or knowledge about internet availability and uses are you aware of in the area?
   g. Have you provided any training or other resources to residents and/or businesses to help them understand the benefits of internet use? If yes, can you please provide additional information (what, when, where, how, etc.)?
5. We have many opportunities for partners to help with this project. Which of the following would be of interest to you?
   a. Suggest digital skills resources they have that could be relevant to this project
   b. Suggest locations and opportunities where 4-H training may be relevant in local communities
   c. Co-lead on marketing and awareness of training opportunities to both Airband customers and the broader community
   d. Co-lead on local storytelling to local media
   e. Helping setup and/or deliver skills training in some cases

Again, we appreciate your time and welcome opportunities to work together.

Recruitment and Retention of 4-H Tech Changemakers

The following ideas may be helpful for 4-H faculty and staff in building and maintaining the local 4-H Tech Changemakers teams.

Recommended skills and traits for teen participants:

- Caring, compassionate individuals who are interested in serving their community.
- Comfort in working with adults one-on-one and in a team.
- Familiarity with technology devices and uses (i.e., e-mail set-up, Internet skills and safety, social media, coding).
- Ability and interest to help instruct adult community members – one-on-one and in small groups.
- Time to work on the project (i.e., availability and coordination with other activities such as family, sports, music, or jobs)
- Translation/interpreter skills, if needed in the community.
- Interest and ability to working on promotion materials, session planning, etc. (Not a requirement for all youth)
- Experience and comfort presenting in front of a group during workshops, community meetings, etc. (Not a requirement for all youth)

Possible advertisement for recruitment:

If you love technology and are interested in new opportunities, then 4-H Tech Changemakers is for you. As part of the program you will learn new technologies, get training in leadership and public speaking, and have an opportunity to help others. [Insert county name] 4-H will provide you the tools and training needed to serve as a digital ambassador in our community, teaching others how to make the most of broadband access and digital technologies. This project is part of the partnership between the National 4-H Council and Microsoft to close the connectivity gap in rural areas.

Suggestions for retention:

- Some schools require students to do community service. Check local school requirements to determine if the project can be considered an approved community service activity. Record and sign off on community service hours. (Offering community service hours may be a helpful tool for recruitment as well.)
- Be considerate of the teens' schedules and provide flexibility when appropriate.
- Be consistent with meeting dates, times, and places.
- Ask the teens about their "spark" -- what part of 4-H Tech Changemakers intrigues them. Try to assign tasks that match their "spark."
- Give each teen a role and responsibility. Some are more comfortable with talking to media; some may prefer creative art (flyers, power points, etc.); some may speak well to a group while

- Provide 4-H Digital Ambassador t-shirts or other wearables for them, so they feel more like a team.
- Offer to serve as a reference or write a letter of recommendation based on participation in the project.

Note: *A huge "thank you" for these lessons learned to Jeannie Kiehn and the Microsoft 4-H Tech Changemakers team led by Washington State University Extension 4-H in Quincy, Washington.*

4-H Tech Changemakers

Impact Measures DRAFT

Goals	Outcomes	Indicators	Tools
Empower community members to adopt and use technology to improve their opportunities and outcomes through use of broadband internet.	Residents of designated communities will gain technology awareness and skills related to what broadband internet can provide.	Community members will be assessed on confidence in using online tools, trust in digital resources, increased digital skills, desire for continued learning & quality of teens-as-teachers approach after participation in educational activities provided by 4-H teens.	Short 5-6 question survey administered to participants post educational activity.
4-H Digital Ambassadors engagement with lawmakers, media and other stakeholders will raise the visibility of this partnership and our mission.	4-H Digital Ambassadors (teen leaders) will be trained as spokespeople to lift up and expand youth voice in this critical conversation.	Evidence of the visibility of the issue and solution to the digital divide raised through: • Placement of stories in targeted press outlets and other communications to policymakers • Participation in thought leadership platforms among key stakeholders • Dedicated website presence on 4-H.org for visibility and community resources • National exposure on multi-media platforms through survey, youth articles and blogs	Marketing Toolkit
Infuse positive youth development approaches in relation to citizenship and technology skills development throughout the life cycle of the project.	Teens will successfully engage their defined community to begin to solve the digital literacy issues in their community.	Teens will increase knowledge and interest in technology and community service.	4-H Common Measures Tool

Lesson Title: Strong Passwords

Content Area: Privacy and Security

Overview:
This lesson shares the importance of creating strong passwords for use in digital environments. An important component to digital privacy and security is ensuring personal passwords are strong and unable to be easily compromised. Weak passwords can lead to hardware damage, identity theft, and financial loss.

Objectives:
After participating in this lesson, adult learners will be able to:

- Explain the importance of strong passwords
- Identify the characteristics of strong passwords
- Apply the characteristics of strong passwords to create/modify their personal passwords

Materials & Supplies:
The following materials and supplies are needed for this lesson:

- Digital devices: computers, tablets, smartphones (activity 1, activity 2)
- Access to the Internet (activity 1, activity 2)
- Keyboard Image (activity 3)
- Flip Chart & Markers (activity 3)
- Password Slips & Bowl (activity 3)

Preparation:
In preparation for this lesson, facilitators should:

- Review lesson plan
- Ensure Internet connectivity and check website links
- Print keyboard images
- Print and cut password slips

Terminology:
The following terms will be discussed during the lesson:

- **Password**: a combination of keyboard letters, numbers, and characteristics that must be entered to gain admission into many online services (e-mail, social media accounts, online shopping accounts, etc.)
- **Password Manager**: a service that allows users to store various passwords and other sensitive information in a virtual vault that is locked and stored on the company's servers, usually for a fee
- **Two-factor Authentication Services**: a means of accessing information by having two-factors (or steps) in the verification process. Typically, users are asked to prove their identity by providing simple credentials such as an email address and a password. A second factor of authentication such as a physical token, phone call, text verification, is then used to add an additional layer of security

Background Information:
People use locks on cars and security alarm systems on houses to protect their possessions. Passwords when using electronic devices are designed to protect personal information. Risks associated with using weak passwords include people impersonating you to access your bank account and other financial services, purchase items online, impersonating you in social media networking sites, and accessing private information on your computer. Passwords can be used to log onto a computer, sign into online accounts (e-mail, social networking, shopping, etc.), unlocking a cell phone or tablet, etc. Having a strong password can reduce, not eliminate, the risk of being hacked and having personal information stolen.

Activity 1: Password Strength Tester

NOTE: *Remind participants to not share their password (even as an example) during this lesson.*

Have participants enter a current password into a password strength tester: https://www.cscan.org/PasswordStrength/. This password strength tester is maintained by the Centre for Security, Communications, and Network Research with the School of Computing, Electronics, and Mathematics at the University of Plymouth in England. It is a trusted password strength testing site.

After entering their password, have participants assess their score:

- What was the strength?
- What was the categorical rating?
- What are strong features of the password?
- How could participants make their password stronger?

Activity 2: Forming Strong Passwords

Show participants a video(s) about password creation:

- https://www.youtube.com/watch?time_continue=163&v=pMPhBEoVulQ
- https://www.youtube.com/watch?v=aEmF3Iylvr4

NOTE: *It is recommended to show the videos mentioned in this lesson on a screen projector with speakers. However, if that equipment is not available to you, have participants view the video on their own devices and then proceed with the activity.*

NOTE: *Both of these videos reference crooks. Remind participants that while there is a risk with any online activity, the goal is to reduce risk and create a strong password. You do not want to cause fear or concern for your participants, since they may already be untrusting of digital services.*

Facilitators should lead a discussion about different strategies for creating and maintaining strong passwords. Many digital platforms set their password requirements, so it is always recommended to check the minimum password requirements before creating a password.

- **Length**: most platforms require a password to be at least 8 characters, but many security experts recommend passwords to be at least 12 to 14 characters in length.
- **Unpredictability**: passwords should not include names, dates, street addresses, birth cities, common word (like the word password), etc. A mixture of numbers, symbols, capital letters,

and lowercase letters is recommended. Capital letters should be in the middle of the password, not reserved for the beginning or end.

- **Keyboard Patterns**: using a special pattern on a keyboard to create a password should be avoided. This was once considered a way to create random passwords, but it is no longer effective.
- **Phrases**: Security experts are now recommending that phrases be incorporated into a password, but the phrases should not be famous/well-known. They should be abbreviated and not be word-for-word. For example, "I ate mashed potatoes for dinner" could be "eye8M@SHEDpot@toe$4d!nner".

The same password should not be used for multiple accounts. Some security experts recommend using a password manager. Password managers are services that provide a place for users to store various passwords and other sensitive information in a virtual vault that is locked and stored on the company's servers, usually for a fee.

It is also recommended to not share passwords in-person, over the phone or in a text message, or by e-mail. Legitimate companies will not ask for a password.

Some sites offer or require a two-factor authentication services. Users have to complete two-factors (or steps) in the verification process, which typically involve a username/password for the first factor. The second factor of authentication such as a physical token, phone call, text verification, is then used to add an additional layer of security. Adding two-factor authentication services to accounts provides more security.

Show participants a video about two-factor authentication services:

- https://www.youtube.com/watch?v=Y4pzMHe_gp0

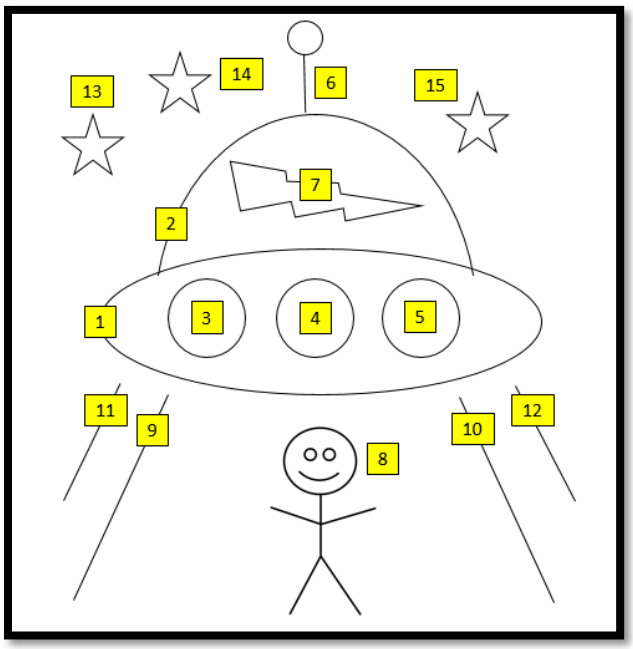
Not all account types, websites, etc. offer two-factor authentication services, but these should be enabled whenever possible. Facilitators may want to demonstrate two-factor authentication services, as long as it does not pose a security threat with their personal accounts and information.

Facilitators should emphasize that many social media platforms have personality quizzes, "about me" sections, etc. that generally ask personal information – birthdate, birth city, car make and model, name of a favorite teacher, school mascot, favorite color, pet's name, etc. These quizzes may seem harmless, but they offer personal information that may be used in a password. This information should never be shared on social media sites; it gives criminals additional information to guess passwords.

Activity 3: Password Challenge

Depending on the size of the group, facilitators may choose to subdivide participants into smaller groups. Each participant needs a copy of the keyboard image. Each group needs a flipchart and markers. This game is similar to the game "hangman" – however, hangman promotes a negative image of suicide, so this activity involves an alien abduction. The scene is comprised of 15 components.

Facilitators should show the participants the top 25 most-used passwords from SplashData. These are examples of weak and overused passwords. Lead a quick discussion about why these passwords are ineffective.



The top 25 most-used passwords from SplashData should be printed on individual strips of paper and placed in a bowl. One participant will be the "host" and choose a password from the bowl. The host will record blank spaces for each character of the password. Participants will take turns guessing characters – remember they can be upper or lower case letters, numbers, or special characters. Each time a character is correctly guessed, the character is recorded in the blank. Each time a character is incorrectly guessed, a part of the alien abduction scene is drawn. The game ends when the password is correctly guessed or when all components of the alien abduction scene are drawn. As a way to make the game easier, facilitators could consider the guess of any letter would be for both upper and lower case. For example, guessing the letter "a" include both upper case A and lower case a.

The game continues until each person in the group is the host. Other variations include the host creating a strong and effective password (using the characteristics described in activity 2) and participants have to guess the strong password.

NOTE: *Remind participants that these passwords are the top 25 most-used passwords and should not be used as strong passwords.*

Reflection:
While the intent is for the activity to build privacy and security skills related to technology, it is important for the facilitator to lead a debrief discussion at the end of the lesson. Potential debrief questions could include:

- Why is it important to have strong passwords?
- What are some tips for having strong passwords?
- What is one change you can make to your passwords as a result of this lesson?

NOTE: *Remind participants to not share their password (even as an example) during this lesson.*

Resources:

- https://www.wired.com/story/7-steps-to-password-perfection/
- https://www.techsafety.org/passwordincreasesecurity/
- https://www.cscan.org/PasswordStrength/ProtectingYourselfOnline.pdf
- https://www.commonsense.org/education/lesson/strong-passwords-3-5

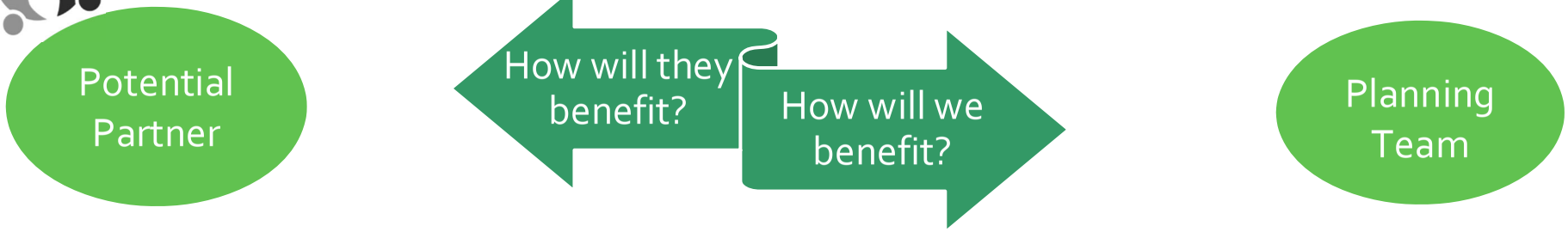
Project Management Plan

Name: _____ State: _____

Steps to Accomplish	Responsibility	Goal Date	Completion Date
Preparing for Trainings & Events			
Communicating with Key State/Regional Stakeholders			

Managing Administrative Responsibilities			

Designing a Win-Win invitation



Potential Partner	Their Benefit	Our Benefit	Who Will Contact Them

Plan of Action

Key Contact: _____ County: _____ State: _____

Digital challenges our community faces now

Who in our community might need help with digital skills?

How will we assess community digital skills needs? Who will we ask?

What we hope will be better in the future

Plan of Action

Steps to Accomplish *What do we need to do? Be specific.*	Responsibility *Who will do it (or take a lead role)?*	Goal Date *When do you need the step completed?*	**Status:** *Green- Completed* *Yellow – In process* *Red—Stalled or not yet begun*
Building Our Training Team			
Getting Partners on Board			

Plan of Action, Continued

Steps to Accomplish *What do we need to do? Be specific.*	Responsibility *Who will do it (or take a lead role)?*	Goal Date *When do you need the step completed?*	**Status:** *Green- Completed* *Yellow – In process* *Red—Stalled or not yet begun*
Planning Our Sessions (what, where, when)			
Marketing Our Effort			

WORKING WITH THE LOCAL INTERNET SERVICE PROVIDER (ISP):

Important

OUR TEAM MEMBERS: