Tech Tools

for Literacy in Tonga

Part 1:
Why this Technical Note Was Written

Since our English Literacy Project was launched in late 2012, Peace Corps/Tonga Volunteers (PCVs) and staff have explored how "technology" might be used to achieve our project objectives.

As the project proceeded, the range of ways that PCVs were using technologies expanded considerably to include:

- using computers to create and share lesson plans and teaching materials;
- using computers to help Tongan teachers participate in professional training programs and to strengthen their basic computer skills;
- using MP3 players and phones to play music, both for English instruction (e.g., through a series of English-instructional songs made by two PCVs) and to engage students and community members in physical movement (to make learning fun and energizing and to promote healthy physical exercise);
- working with counterparts to capture, understand, and share student assessment data;
- showing commercially-available videos (especially children's videos) to expose students and families to English in fun ways;

Our English Literacy Project

Since late 2012, Peace Corps/Tonga's English Literacy Project has worked with the Ministry of Education and Training (MET) and other partners to develop an innovative "student-centered" approach to language and literacy education.

This is one of a series of Technical Notes that describe practices developed in this project. It refers in particular to Project Objective 1.3: *"Improve Grade 3-8 teacher use of library and ICT (information communication technology) resources."*

- using videos to capture and share PCVs doing practice teaching during training programs and in action in their villages – to use as both a professional development tool for Volunteers and counterparts and as a public-awareness tool;
- using computers to prepare funding proposals, reports, and other administrative documents for schools;
- providing technical support to schools, to help them use and maintain their electronic technologies (e.g., printers and copy machines) more efficiently.

In 2016, we also began working with SolarSPELL, an innovative project of Arizona State University which is working with four Peace Corps posts in the Pacific Region. The SolarSPELL team provides PCVs with a solar-powered, climate-resistant "computer" equipped with digital teaching resources selected to be relevant to Pacific region schools.

And, apart from the above-described educational uses of technology, PCVs are using personal blogs, Facebook pages, web sites, and other social media to share their experience with friends and family "back home" and with Tongan friends and co-workers. These activities enhance cross-cultural understanding and friendship between Americans and Tongans and achieve Peace Corps' global goals of intercultural understanding and cooperation.

This Technical Note draws on discussions we've had in training sessions, on the work of our PCV Technology Group, and on a technology survey conducted of all Volunteers in early 2017 to:

1. summarize ways our Volunteers, staff, and partners have been using technologies so far and what we've learned in the process;
2. identify actions our post and partners – and others interested in using technologies for developing an effective literacy education system – might take to build on what we've learned;
3. suggest ways for new PCVs to get started with figuring out how they might use technologies;
4. point to additional relevant resources our Volunteers, staff, and partners might explore.

This document will be revised as we learn more (e.g., from review of our PCVs' Volunteer Reporting Forms, observing our PCVs in action in the field and in peer-sharing sessions in training events, interaction with partners inside and outside Tonga, and other sources).

Part 2: How Our PCVs Have Been Using Technologies So Far

Linking technologies to our Project Goals and Objectives

Our PCVs have been very creative in how they have been developing new ways to use technology. So far these uses of technologies (a) include several types of electronic technologies (i.e., not just "computers") and (b) are helping to meet both the goals and objectives of our English Literacy Project and the "Global Goals" that all Peace Corps posts try to accomplish. These Goals and Objectives are presented below:

The three Goals and seven Objectives of our English Literacy Project

Goal 1: Improve teachers' skills.

- Objective 1.1: Increase Grade 3-8 teacher use of student-centered methods.
- Objective 1.2: Increase Grade 3-8 teacher use of student-centered materials.
- Objective 1.3: Improve Grade 3-8 teacher use of library and ICT (information communication technology) resources.

Goal 2: Improve literacy skills of Grade 3-8 students.

- Objective 2.1: Improve Grade 3-8 English literacy through classroom learning.
- Objective 2.2: Improve Grade 3-8 English literacy through extra-curricular learning.
- Objective 2.3: Improve Grade 3-8 English health literacy.

Goal 3: Improve community support for and benefit from literacy development opportunities.

- Objective 3.1: Increase community involvement in activities that support literacy development for children, youth, and adults.
- Objective 3.2: Increase community members' English literacy.

The three "Global Goals" of all Peace Corps posts (paraphrased)

1. Build capacities of host country.
2. Help host country understand U.S. culture and people.
3. Help American people understand Tongan culture and people.

While only one of our Project Objectives (i.e., Objective 1.3) explicitly refers to "technology," we have found that technology can be used to support all of the other project objectives and the three Peace Corps "Global Goals," as well. The descriptions of how PCVs have been using technology, below, refer to how technologies might be used to achieve these various Goals and Objectives.

How our PCVs have been using technologies over the past five years

Across PCV sites: PCVs have created several ways to share educational resources among each other and with Tongan counterparts.

This began in 2013-2014, when two PCVs (a married couple) created a Drop Box folder through which they and other Volunteers began to share lesson plans and other teaching resources with each other. As this collection grew and as more Volunteers got involved in using it, PCVs realized that many Volunteers were not able to access the on-line Drop Box collection due to having limited Internet access in their remote locations on multiple islands.

So this digital collection was shifted to a system of flash drives (called the "PCV FLASH") that were maintained by a PCV "Information and Technology Committee." Initially, each PCV received one FLASH drive and, as the collection grew, this was expanded to two FLASHes per Volunteer. Each FLASH contained a mix of PCV-made and PCV-collected resources and some additional resources provided by post staff and by PC headquarters.

By 2016, Volunteers were saying that, though potentially useful, the now-large number of resources needed to be better organized. The Information and Technology Committee (re-named as the "Technology Group") was expanded and it (and several individual PCVs) began to decide what resources were most useful and how to best organize them so they were easily accessible to PCVs and counterparts.

All of this resource-sharing work was of potential use to three important partners of our project:

- The Ministry of Education and Training (MET) has periodically expressed interest in making such a collection available to MET staff. In late 2014, the original two PCVs who set up the Dropbox collection gave a presentation about the Drop Box to representatives of the MET Curriculum

Development Unit and Professional Development Unit, though the idea of adapting this model is on hold due to limited resources.

- The Institute of Education at the University of the South Pacific also has an interest in creating an on-line system for sharing educational resources with educators in Tonga and possibly with other users (e.g., parents).

- The SolarSPELL team at Arizona State University (ASU) has worked with our staff and Volunteers to identify appropriate resources we have already collected. The ASU team has been adding these resources to the SolarSPELL hard drives that are being distributed to our PCVs. (See more about SolarSPELL –- which is also working with our University of the South Pacific partner -- below.)

<u>How this relates to our various Goals and Objectives</u>

Creating and sharing digital resources can help PCVs:

- *Build counterpart expertise in the use of student-centered methods and materials while also strengthening technology skills needed for ongoing professional development (Project Objectives 1.1 and 1.2).*
- *Achieve Project Objective 1.3 (which focuses directly on increasing and using ICT as an educational resource).*
- *Achieve Project Objectives 2.1 and 2.2 (by providing teachers with print materials, educational software, and technology-based learning tools teachers can use to teach English during and outside regular school hours).*
- *Achieve Project Objective 3.1 (by providing print, video, and audio resources that can be used to inform family and community members about the why's and how's of family and community involvement).*
- *Achieve Project Objective 3.2 (by providing educational resources that can be used with young children, youth, and adults to help them enhance their English literacy).*

At the school level: PCVs have been exploring the use of several technologies to help students develop English literacy and to build teacher capacities:

- Organizing and upgrading a school's computer equipment: When they arrive at their schools, new PCVs sometimes find used computer equipment in the office, library, or classrooms, or possibly stored in a closet. These computers can either be working fairly well or – as is often the case – in various stages of disrepair.

  Tonga is not very friendly to the average desktop computer due to physical conditions (e.g., heat, humidity, dust, insects, and even geckos that can damage computers' inner parts), power surges (which can "fry" computers with sudden jolts of electricity), computer viruses commonly conveyed on flash drives that travel from one computer to another, and/or lack of basic maintenance.

  Despite these challenges, some PCVs have scrounged together used and/or donated computers to create working computer labs in their schools. (It helps that some of our PCVs arrive with previous expertise in basic computer maintenance.) In some cases, these computers are integrated into more traditional school libraries. Secondary schools tend to have significantly better computer resources than do primary schools.
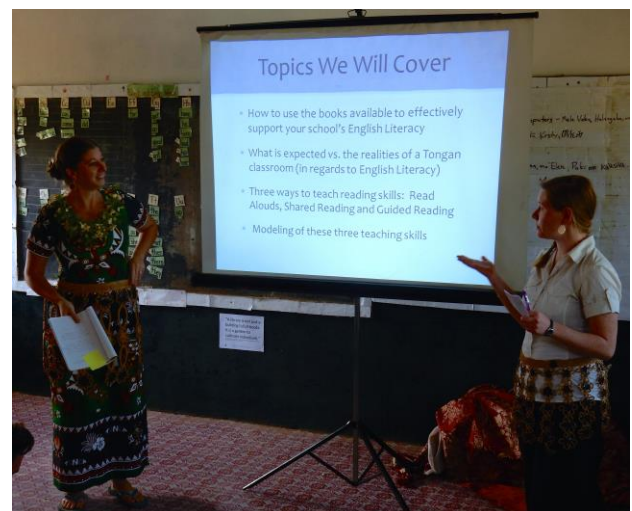
  (Project Objective 1.3.)

- Using computers to teach English skills and/or computer skills to students and teachers:

  o Several PCVs have used phonics software in their school's computers to teach phonics and computer skills simultaneously. *(Project Objectives 1.3, 2.1 and 2.2.)*

  o Some PCVs use their personal laptops or the school's computers to teach basic computer skills to their students, their counterparts, or their neighbors. Some use "Mavis Beacon"-type typing instruction software, which also reinforces English language skills through games and other activities. A PCV teaching at a secondary school in 'Eua has used project-based learning activities to help

students learn Word and other basic software by using these programs to carry out a common task (e.g., write a letter to someone). *(Project Objectives 1.1, 1.2, 1.3, 2.1, 2.2, and 3.2)*

- <u>Using movie DVDs as a tool for teaching English and for classroom management</u>: Several PCVs use movies (on DVDs or in files on their computers) to reinforce English skills (e.g., "Schoolhouse Rock," "Matilda," "The Sound of Music," "Sister Act.") In one example, a PCV showed the Disney film, "The Jungle Book," to her older students and then had them discuss and write about what they saw in the movie. One PCV uses movies as a reward for good behavior; if the class behaves well, they get to see a movie on "Fun Fridays." *(Project Objectives 1.3, 2.1 and 2.2)*

- <u>Using CDs and MP3 players to teach English, channel student energy, and/or engage kids in physical movement</u>: Two PCVs (a married couple) made a music CD ("Hiva 'a e Fanau") containing simple English songs that our other PCVs are now using in their English classes. Some PCVs play music (e.g., the soundtrack from "Frozen") in their classes using small, inexpensive speakers connected to their MP3 players or phones. (The music is often used to get students up and dancing or otherwise moving, as a class management tool, as a physical exercise activity, or to reinforce English skills.) One PCV uses music to accompany her "Brush Teeth and Dance" sessions, in which kids practice brushing their teeth and learning relevant English words, while dancing along to music. Another PCV uses Bluetooth to share audio files among school staff (and a few parents). These files contain various English songs

which teachers and parents can use with their children. (The PCV's principal uses "The Alphabet Song" as his ring tone. This ties in with Tongans' general love of music.) *(Project Objectives 1.3, 2.1 and 2.2)*

- <u>Using computers to help teachers participate in on-line courses</u>: Some PCVs have tutored counterparts who are taking on-line professional development courses through the University of the South Pacific. The Volunteers discuss course content, help the counterparts write papers, and otherwise help the teachers use this technology to earn credits toward a bachelor's degree in education. This is potentially a great way for PCVs to build the capacity of Tongan teachers. *(Project Objectives 1.1, 1.2, and 1.3)*

- <u>Using Skype to communicate with U.S. schools</u>: Several PCVs have used Skype to communicate with schools in the U.S. The students in the Tongan school and U.S. school send messages and photos back and forth to each other, do joint assignments (e.g., about using maps), and sing a song to their fellow students in another country. In one school, the PCV communicated with the teacher and a

few students in the PCV's younger sister's middle school. Though this was not a highly formal exchange, the Tongan kids got to see U.S. children in a natural setting and gave them exposure to fluent English-speaking students. *(Project Objectives 1.3 and 2.1 and Peace Corps Global Goals 2 and 3)*

- Making videos: PCVs have used video technology to enable students to make presentations to their parents and to send videos to students in a U.S. school. *(Project Objectives 1.3, 2.1, and 3.1 and Peace Corps Global Goals 2 and 3)*

- Using spreadsheets to record and share class records: Some PCVs are using Excel spreadsheets to record the results of literacy assessments they are doing with their students. They then share the results with supervisors and teachers, who find the resulting data informative. This "electronic grade book" also helps schools meet reporting requirements set by MET. *(Project Objectives 1.1, 1.2, 1.3)*

- "Bilingual audio books:" In 2016, two Volunteers developed prototypes of children's "audio books" which students, teachers, and parents could use to read through a story with an English-speaking and Tongan-speaking narrator voicing the words so the reader can hear the words while reading them. The PCVs used a combination of QuickTime and basic computer and phone software, and put the audio onto parents' cell phones.
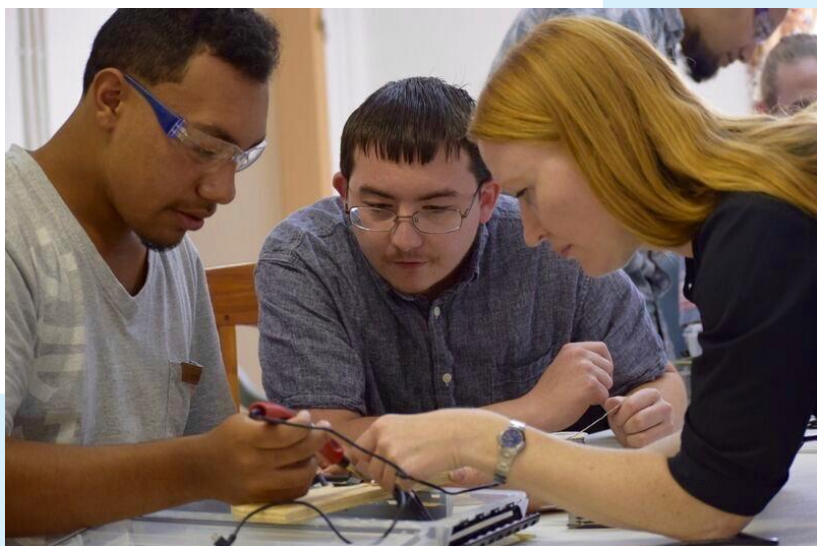
Part 3: What We Might Do To Support Further Development of Appropriate Educational Technologies in Tonga

The above-described collective and individual efforts demonstrate the interest and innovation of PCVs in using technologies to meet our Project Goals of:

- helping students develop English literacy,
- enhancing the professional development of their Tongan colleagues, and
- helping families and other community stakeholders support and possibly benefit from literacy development.

These efforts also are informing us about:

- how various kinds of technology might be used;
- what is required (e.g., equipment, software, power supplies, lesson plans) to enable PCVs and others to use technologies effectively;
- obstacles that can make it difficult or impossible to use technologies;
- supports that PCVs, students, Tongan counterparts, and others (e.g., parents) need to use technologies effectively.

Here are some steps that our post might take to build on what we have done and learned to date. Where feasible and appropriate, our PCVs should take these steps with Tongan partners to enable them to use technologies in support of learning more generally and English literacy development more specifically:

Step 1: Support the Technology Group.

Currently, our Technology Group is in the re-building stage. Members include PCVs on remote islands with limited phone and Internet service who have difficulty connecting with other group members. Group members are also busy doing their own day-to-day work, and find it hard to work with fellow PCVs scattered in multiple locations. Group members might also have limited expertise in technology-related issues or in running a PCV group. Programming, Training, and Evaluation staff should assign one or more staff members and perhaps a more-experienced PCV to work with and support this group.

Step 2: Connect with one or more partner agencies (from within and outside Tonga) to do this work.

While it is encouraging that our PCVs have been doing innovative work with technologies so far, we must remember that none of it will likely be used unless we have Tongan partners who are willing and able to learn from and use what our PCVs are producing. (The same is true of all of our PCVs' work in such areas as development of instructional and assessment resources, reading materials, etc.)   We should again reach out to other partner organizations in Tonga, including those represented on our Project Advisory Committee and perhaps others we haven't considered previously. In that outreach around the topic of "How Tonga might use the technology resources being developed by Peace Corps Volunteers," we might:

- Share what our PCVs have done and learned so far related to uses of technology in support of literacy development.
- Learn what other institutions are doing –– or interested in doing –– vis-à-vis using technology.
- Identify ways that our PCVs might work with those agencies on areas of mutual interest.   Options might include:
    - Developing an on-line system for sharing digital resources with teachers and perhaps other audiences.
    - Training Tongan teachers in appropriate uses of technology.
    - Doing special projects in selected schools, to further develop models of technology use.

Because we are already working with SolarSPELL (based at Arizona State University), we might also explore roles SolarSPELL might play in a well-coordinated multi-partner partnership in Tonga. We should also explore how to use PCLive (the online resource-sharing system managed by Peace Corps headquarters) to share resources among PCVs and possibly other audiences.

Step 3: Continue to identify, develop, refine, organize, and distribute useful digital resources.

As individuals and in collaborative groups, PCVs should continue to do the work of identifying

existing useful digital resources, developing new ones or refining existing ones, organizing those resources into easy-to-access and –use ways, and distributing them to PCVs and other appropriate audiences.

Step 4: Deal with particular hardware and software questions.

From experience so far, we have learned about various challenges that PCVs and other users of technology have. These challenges include "hardware" and "software" challenges. Examples include:

Hardware

- Projectors: It is helpful that PCVs are now getting access to videos, photos, and other digital resources to use in instructional activities for students, professional development activities for teachers, and community outreach and parent education activities. However, it would likely make such resources much more useful if Volunteers and counterparts were able to use small, durable, low-cost projectors to project images onto walls so that they were more visible to intended audiences.   Might a partner or donor support at least the piloting of a reasonable number of projectors by our Volunteers?
- Solar panels: A small number of PCV schools lack reliable electricity sources altogether or rely on solar panels for their source of power. Those PCVs placed at schools that

use solar power say that it would be helpful for them to receive training and technical assistance from well-informed and reliable resource persons, so that the Volunteers can work with counterparts to use and maintain solar power equipment efficiently.

- Phone and Internet service: We should try to ensure that all PCVs have reasonable access to quality phone and Internet technology and service.

- Bigger USBs: PCVs might need USBs with larger capacity, to handle the increasing amount of materials being developed in our project.

- Durable computer equipment: SolarSPELL has the potential of providing PCVs and others with a durable, low-cost computer, but currently the number of SolarSPELL devices available to PCVs is limited. Might more Volunteers be equipped with SolarSPELL devices in the coming year?

Software

- Appropriate educational software: We need to continue to identify low-cost (preferably free) software for PCVs and counterparts to use for English instructional and assessment purposes. These can be provided to PCVs on the PCV FLASHes and via SolarSPELL. This could include creating of new instructional resources (e.g.,

slide shows, short movies) by our PCVs and partners, geared to the particular learning needs of Tongan students and tied in with other resources (e.g., Sight Word Books) already being developed by PCVs and partners.

- Anti-virus software: To help the computers found in PCV schools to become functional, it would be helpful to install anti-virus software on those computers.

Step 5: Continue to document and evaluate how our PCVs are using technologies.

While the above building of our Technology Group and partnerships with organizations goes on, we should also continue to document and evaluate how our PCVs are using technologies, what works and what to avoid, and supports needed. This can be done by staff, more-experienced PCVs, and the Technology Group via periodic surveys, site visits, reviews of VRF submissions, and discussions during training events.

Sharing what works related to technology use can help us build on what we are learning rather than continually reinventing the wheel. This kind of thoughtful "collaborative continuous improvement" has helped our post continue to go forward with other initiatives such as the production of Sight Word Books.

Step 6: **Communicate promising practices to PCVs (e.g., in training events) and to MET, partner schools, other local stakeholders, and PC HQ technology and programming specialists.**

Information about promising technology practices being developed within our English Literacy Project should be shared in a user-friendly way among PCVs, staff, and counterparts (perhaps via an on-line file sharing system, in Weekly Emails, in training events, on Facebook, and/or in a guidebook). Good documentation can also be used to guide future trainings, programming decisions, outreach to partners, etc.

We might share this with MET via our Project Advisory Committee meetings and in meetings with principals and teachers. We might also tell other organizations and individuals in Tonga (e.g., secondary and tertiary school principals, technology companies, other international organizations, school librarians) which might have an interest in using technology for learning. This information might be included in annual reports, on the post web site, on PCLive, and in other ways.

Step 7: **Identify challenges and opportunities that we could use help with.**

While we are encouraged by the many creative way that PCVs are developing technologies for their schools and communities, we know that a number of challenges and questions are emerging from this work. We are also coming across examples of international organizations, forms of technology, and other resources that our PCVs might tap into. (See "For Further Information" at the end of this document.)

We therefore propose that, as we collect information from our PCVs and from sources like the technology staff at PC HQ and other

international organizations, we compile a list of questions and ideas that we might seek their input on. We can use these questions to guide our interactions with resource persons at PC HQ and in various organizations who might provide technical assistance and other resources in support of our PCVs' work with technologies.

Step 8: **Reach out to PC HQ and other sources (e.g., SolarSPELL) to explore how we can deal with the above challenges and opportunities.**

As we pull together technology-related opportunities we might pursue, we might reach out to resource persons at HQ (in the Office of Innovation and in on-line discussion groups, including the Technology 4 Development Community of Practice), our SolarSPELL partner, and elsewhere (e.g., in NGOs that are making technology available to low-income communities such as Open Learning Exchange <www.ole.org/about-us/> who might give us feedback on education- and technology-related questions.

Step 9: **Continue to field test and disseminate technology-related ideas and provide support to PCVs and other stakeholders who are involved.**

We might set up project teams whose members work together to investigate particular uses of technology and then share their answers with all PCVs in Tonga and with the resource persons identified in Step 6 above. We should see our work with technology as not necessarily producing "the final answers" but as "work in progress" which gradually builds models which can be used in Tonga and possibly elsewhere inside and outside Peace Corps.
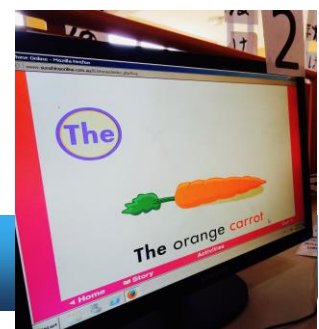
Part 4: What This Means for New PCVs

The actions above are particularly relevant for staff, current PCVs, and our partners. But where do new PCVs fit into this? What actions should they take during Pre-Service Training and in their first six months at site to get up to speed on – and contribute to – what our post is doing and might do related to using technologies? Here are some suggestions:

1. Take time (especially during your first three months at site (which can include some very "slow" periods when your school is closed and many community members are away on holiday) to become familiar with the electronic resources our PCVs, staff, and partners (especially SolarSPELL) have already assembled.

2. Create an initial "tool kit" of electronic resources you might want to get started with.   Try out some of the activities, videos, audio recordings, etc. with children and families in your community. This will not only help you become familiar with how to adapt these resources for various purposes and audiences, but help you develop relationships with children and community members you will be working with in the future. (See #6 below for examples.)

3. Connect with the PCV Technology Group to offer ideas for additional resources that might be included in the digital resource collections (i.e., the PCV FLASH and SolarSPELL). Find out if you might become a member of the Technology Group (or other PCV Committees or Groups).

4. When you first arrive at your site, do an initial inventory of the electronic resources in your school. What equipment currently exists in the school? What condition is it in? What is it used for? Who uses it? What have been the results and challenges (material and human) associated with using these technologies? What interests do your co-workers have related to technology and how you might work with them in this area? Compile a summary of your findings and share it with your principal, counterparts, PC staff, and the Technology Group.

5. Do a similar inventory of how families in your community already use technology. Do they have cell phones, electronic tablets, computers, DVD players, TV sets, radios? How do families use these technologies? Are the technologies used to support children's learning – either directly or indirectly (e.g., watching English-language videos can help children develop comfort with and fluency in English).

6. Try out various uses of technology with children, co-workers, families, and others in your community. This might be done fairly informally or more formally.

For example, you might:

a. Watch English-language videos with your students or community members. These might include feature films as well as educational videos.

b. Run exercise classes (including Zumba-type dance) with students or community members, using your MP3 player or phone connected to portable speakers. Use English when you talk with participants, while helping them engage in a fun, healthy, social activity and also developing an understanding of who they are and how you might work with them in the future.

c. Provide computer-skills tutoring for counterparts and/or community members. In the process, you will better understand their learning needs (related to technology and other areas like English). Incorporate English into the tutoring, in the way you communicate with learners and in the content of the tutoring (e.g., have participants write an email, note, or list in English).

d. Use recorded music (including our PCV-made English song series, "Hiva 'a e Fanau") to teach basic English sounds and vocabulary to students. Record their performance and play it back to

hear what they sound like, and discuss how their pronunciation, word choice, grammar, etc. might be improved. Do these recordings periodically and save them in an "electronic portfolio," as documentation of the growth of the students' fluency and other skills over time.

e. Work with other PCVs who already have a SolarSPELL device to try out the content and features (e.g., wireless hot spot) of the SolarSPELL device. Learn how you can get actively involved in the field-testing and on-going development of SolarSPELL and related technologies like the PCV FLASH.

Overall, have some fun with technology while doing "action research" to systematically figure out how you, other PCVs, and counterparts might use technology in effective ways to meet our Goals and Objectives.

As you proceed in your service in Tonga, consider:

Technology is all around you in your school and community. How can teachers, students, and families use it to support learning and literacy development?

FOR FURTHER INSPIRATION, explore . . .

- Peace Corps/Tonga web site: www.peacecorps.gov/tonga
- PCLive: Go to https://pclive.peacecorps.gov/pclive/index.php/login/dashboard; create an account and log on; search for "Literacy," "technology," and related terms like "education" and "T4D" to view the many resources developed by PC posts on this topic. (This site is open only to PCVs and staff.)
- SolarSPELL: (www.solarspell.org): Learn about our partner at Arizona State University.
- Rumie: (www.Rumie.org)
- TechSoup: (www.techsoup.org/)
- Engineering for Change: (www.engineeringforchange.org/)
- Cell-Ed: (www.celled.org)
- Using text messages to help parents support their kids: (http://www.nytimes.com/2014/11/15/us/to-help-language-skills-of-children-a-study-finds-text-their-parents-with-tips.html?smid=nytcore-ipad-share&smprod=nytcore-ipad>.)
- XPrize Foundation: (http://learning.xprize.org/)
- Learning Computers, Speaking English: (www.press.umich.edu/332090/learning_computers_speaking_english)
- World Reader (free on-line library) : (read.worldreader.org)
- Sing Me a Story Foundation: (www.SingMeAStory.org)
- Software for the designing of educational materials, including:
  - ComicLife to lay out comic strips: (http://plasq.com/apps/comiclife/macwin/)
  - GoAnimate for making simple animated videos: (https://goanimate.com/)
  - Powtoon free software for animated videos: (https://www.powtoon.com/)
  - Bitstrips (also free!) for making cartoons: (http://www.bitstripsforschools.com/)
- Xtranormal for making animated videos: (http://www.xtranormal.com/)(It apparently closed down but might re-open soon.) For iPad users, Plotagon could be a good option.
- Kreative Komix: (www.kreativekomix.com/)
- PowerPoint is very powerful tool for building graphics with animation.

ACKNOWLEDGMENTS