PLP Innovation and Technology Opportunity Grant Program

1. One paragraph project summary.

With the creation of a Digital Media Lab, we will be able to provide instruction on current digital literacy skills to Teens, building upon our current technology curriculum to support pathways to careers within the STEM economy. The library currently provides digital literacy classes for adults and homework instruction for school aged children. Through a strategic planning process, we have identified a need for teen services and our goal is to acquire resources that will engage them, including virtual reality, video game design, graphic design, music, video, eSports, and podcasting.

2. Explain how this project fits with the library's strategic directions.

This project aligns with the goals established in our 2016-2020 strategic plan. Based on input from nearly 1,000 members of our community and market segmentation data, our strategic goals include supporting personal growth and learning and community engagement:

Personal Growth and Learning
Adding a Digital Media Lab to the library will create an engaging space for teens, who have specifically requested the services the space would provide. As with so many other communities in the Bay Area, education is highly valued by South San Francisco families. Residents expect the library and its two literacy resource sites, Project Read and the Community Learning Center, to serve as places to gain skills and knowledge. While continuing to support basic literacy, we are taking steps to ensure that our patrons have access to 21st century literacies and skills in emerging technologies. We believe that this Digital Media Lab will allow us to create a broad range of programming that our patrons can develop into skills they can use in both their personal and professional lives.

Community Presence and Engagement
A primary goal of our strategic plan is to continue to be a hub of activity and learning, and to increase our presence in the community by partnering and collaborating with local organizations. This project would allow us to build on our partnerships with local schools as well as organizations such as the Boys and Girls Club, Hack the Future, and Bay Area STEM Ecosystems by allowing us to create programming designed to engage the teen population.

In addition to partnering with local schools and other groups, we will provide meaningful opportunities for volunteers to assist teaching teens. We are in a unique position literally and figuratively in South San Francisco, as we are surrounded by tech savvy people who love to share their knowledge with their neighbors.

3. A description of the proposed project including the population served and the demographics of that population.

As analyzed in the library's strategic plan, the population served by the library is highly diverse racially, ethnically, and socioeconomically. More than two-thirds of households are families. Residents use the library for a variety of technological needs, including Wi-Fi, iPad and laptop lending, 3D printing, wearable technology, and virtual reality.

The largest market segment described in our strategic plan, which accounts for nearly two-thirds of the total population, is predominately first and second generation American families, including a high percentage of Asian and Pacific Islander populations that are well educated. Two-thirds of those aged 25 years and older have attended college and more than one third hold a bachelor's or graduate degree. These tech-savvy families with teens are requesting an enhanced digital environment that supports their STEM interests and development of their virtual skills.

Our second largest population segment consists of younger families and is also culturally and racially diverse: more than half the population is Hispanic, 11.6 percent are Asian, and 7 percent represent two or more races. These communities are largely immigrant populations with an educational attainment below the US average. Since 70 percent of the households are families, we have focused our efforts by providing greater learning points with bilingual Technology Learning Center / Makerspace classes and a daily digital literacy program, "Hack your Homework".

Other segments defined in our strategic plan are predominantly young, Hispanic residents with a lower educational attainment than the national average, who would receive equal levels of instruction, offered in Spanish, so that they may gain additional professional computer-based skills.

Funds received from our project proposal will directly aid these, and other, pursuits, encouraging all patrons to become digitally literate and lifelong learners.

4. Goals and objectives of the project.

Goal 1. Increase Digital Instruction for Teens

> **Objective 1. Music and podcast recording**
> Pro Tools is already offered to the public through our Collaboration Room, but with additional recording equipment the library could expand instruction to music production and podcast creation. We believe these programs would have a high appeal to teenagers seeking quality production resources relevant to school projects and club activities, as well as general public interest.

Objective 2. Video game design
After a highly successful Hack-a-thon, provided by Hack the Future, the library has begun teaching digital literacy courses, exploring instruction beyond internet searching and Scratch programming to game development. With Unity game engine licensing, the library could develop basic game designs, including 3D games to play on our Oculus Rift or HTC Vive.

Objective 3. Graphic design and digital content creation
The library uses Canva, a free web-based graphic design program to make its flyers and social media graphics and we like it so much we have begun teaching programs on basic design and resume creation with it. One of our most well-attended programs during Teen Tech Week was "Graphic Design with Canva." With upgraded hardware and software, we can build on the success of these programs and offer more intermediate and advanced courses.

Objective 4. Provide meaningful volunteer opportunities for members of the community
We truly appreciate our volunteers and are incredibly grateful to them for the services they provide to the library and its patrons. A number of volunteers are either currently employed in the tech industry or have formerly worked in it and have offered to teach classes and workshops for us. We aren't often able to take them up on these offers because of a lack of equipment and software, but we hope to be able to change this with this project.

Goal 2. Build Digital Environment for Teens

Objective 1. Create Media Lab
Adding a digital media lab will build on the current popular technology-rich spaces the library provides. Through an earlier PLP Innovation Grant, the library offers a quiet room that can be reserved by patrons or groups of patrons to work with fewer distractions. This space, equipped with a large touchscreen computer and design software, has proven to be very popular and is often booked. Our Technology Learning Center is both a digital literacy drop-in point as well as a Makerspace. On the main floor of the library, demonstrations of high interest technologies are showcased and discussed in greater depth to a higher audience allowing patrons to explore facets of technology they may be unaware the library already offers.

Objective 2. Expand virtual reality collection and mobilize for outreach
Virtual reality is an emerging technology, especially in regards to education. With a rich collection and adequate transportation cases, the library will be able to instruct and engage the community within and outside the library.

Goal 3. Engage our Community

Objective 1. Develop best practices to inform programming and design of new main library

Poised to open in 2021, our new library will be constructed with full consideration of the outcomes of these technology programs. Our Teen Advisory Board and Friends of the Library also have the opportunity to share their opinions, and we plan to distribute surveys through social media and in the library as well as having conversations with our community to find out what new types of programs our patrons would be interested in attending.

5. Project timeline (activities).

This project has a timeline lasting three years.

Timeline	Program / Technology	Description
3 Months	Virtual Reality Programs, Technology Installation and Training	Purchase and install equipment; Expand Collection, Partner with IT, Instruct staff
6 Months	Marketing Community Volunteers Course Development	Fully integrated, adaptable computer lab Professional Volunteers
9 Months	Intensive Courses	Small, intensive instruction in specialized technology, or individual reservation
1 Year	Assessment and Sharing of Best Practices with PLP	Effectiveness reporting
Continuous (for 3 years)	Software Updating Routine Maintenance	Continued digital literacy courses, Individual booking

6. Evaluation of the project.

Project goals will be evaluated through usage statistics, surveys, and community discussion groups, including South San Francisco's Friends of the Library and Teen Advisory Board. The library already has a systematic assessment tracker for all library programming and room bookings that will assist in determining the project's effectiveness. These strategies intend to identify to what extent this project:

- Created effective programs to teach new digital media skills

- Offered teens access to technologies to which they may or may not have regular access

- Provided valuable input in the programming and design process of the new library

- Altered community's overall perception of the library as an accessible digital environment

- Affected library's total visits, attendance, and usage by teens

- Increased volunteer led programming and outreach opportunities

7. Project budget.

2 PCs	$2500
2 4k HD monitors	$1200
Condenser microphone for podcasting	$140
Dynamic microphone for music production	$120
Professional MIDI	$500
Miscellaneous cables, wires, stands	$500
Miscellaneous supplies and consumables	$500
Unity Pro subscription for 2 computers for 1 year	$800
Adobe Creative Cloud for 3 years	$3300
FL studio for 2 computers for 3 years	$300
Steam account for VR games content development	$3600
Promotion	$200
Tax, shipping, etc.	$1340
Total project budget	$15000

8. Sustainability analysis

Funds requested will cover software subscriptions for three years; computers and equipment will be maintained by library staff and the City of South San Francisco's IT department. In 2021, we anticipate moving into our new library where we hope to have more expansive facilities as well as community programming feedback to determine how best to continue the project.