PLP Innovation and Technology Opportunity Grant Program Application

Library Name: Santa Clara City Library

Project Title: Checkout and Code Kits

Select category you are applying under:

☒ Category A: Innovation and Technology Opportunity Grant

☐ Category B: Grant Replication Program

If Category B is selected, enter the name of the grant you are replicating:

1. Please provide a one paragraph project summary.

The Santa Clara City Library is proposing to create “Checkout and Code Kits” to support our patrons’ pursuit of learning how to code. Each Kit will contain a Chromebook, mouse, bag, and detailed instructions and lessons for specific coding languages. All lessons will be completed online through the browser. Library Staff will create at least 10 different coding lesson plans in separate languages so that our patrons can choose whichever language they’d like to learn. This project will also provide opportunities for local teens to serve as volunteer resource specialists responsible for responding to patron questions and providing technical coding support.

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

The Santa Clara City Library’s mission and strategic plan is to "provide opportunities for life-long learning, discovery, and creativity". The “Checkout and Code Kit” program advances this mission by providing opportunities for all patrons of all ages to be introduced to the skill of coding – a valuable attribute for life in Silicon Valley. While there are many coding programs available in the valley, the cost can be prohibitive and serve as a barrier for those who would be interested in learning but not sure if it is something they would enjoy or have talent for. The Checkout and Code Kit would be a free option to introduce the subject without incurring a financial hardship. This would be especially helpful for parents who are interested in having their children learn about coding but can’t afford expensive, market-based skills training. We often hear from parents that they love our coding classes because they can try things out before they make the big investment to pay for classes.

The “Checkout and Code Kit” program also aligns to the Santa Clara City Council priority to "deliver and enhance high quality efficient services" to our community. We know this service
will be a beneficial service to our community because of the success of past coding programs and parent feedback. The City of Santa Clara tagline is "The Center of What's Possible." We want the Santa Clara City Library to be at the "Center of What's Possible" for coding, for everyone and not just those who can afford expensive classes.

3. Please provide a detailed description of the proposed project including the population served and the demographics of that population.

These kits will be designed to meet the needs of all ages - children, teens, and adults. Coding classes are expensive. These kits will allow for those who might not have the monetary means to explore the world of coding. Patrons will be able to check out a kit for a two-week period provided they sign a waiver acknowledging responsibility for the kit while in their possession. The staff member (or volunteer resource specialist) will ask them which language they would like to learn and add those instructions to the kit at check out. Patrons will be welcome to trade in instructions for new ones during their two-week check out period.

When considering the demographics of the Santa Clara City area, there are many (19.8%) under the age of 18. While these kits will not be exclusively for children and young adults, the program will focus on attracting this age group. At least half of the kits (15) will have instructions for beginning coding languages, such as Python, JavaScript, and scratch. The other half of the kits will contain a variety of languages, such as HTML/CSS, Ruby, Java, C#, C++, Swift, and PHP. If this program results in success, the hope is to expand the kits’ languages, both spoken and programming, to make sure we are meeting the needs of the community at large.

The proposed service location area is the area served by the Northside Branch Library. Prior to COVID, several coding groups including Girls Who Code, CoderDojo, Free Code Camp, and LeetCode met at the library one day a week. As such, our experience indicates that coding classes and kits are in high demand in our neighborhood and the surrounding areas. As in-person services are restored, these groups would like to re-establish roots back at Northside as a meeting place. We would like to have these kits available to go in tandem with their coding classes at the library.

4. What are the goals and objectives of the project?

Goal: To provide readily accessible coding lessons for patrons of any age and background.
Objectives:
• Provide patrons with equitable access to coding materials and resources.
• Expand adult patron skill sets useful to the Silicon Valley
• Allow for individual exploration of coding by removing the daunting task of coding setup
• Provide an opportunity for community collaboration through associated programs (Teen volunteers teaching, adults creating programs together, children discussing problems with each other)
5. **Please include your project timeline (include detail of activities)**

   September 2021: Grant Notification  
   September 2021: Kit Creation and Marketing  
     Purchase applicable materials and ensure proper setup of devices. Library Staff will create lesson plans and contact point for kit users. Market kits to patrons.  
   October 2021: Dissemination of Kits  
   December 2021: Evaluation of Kits begins via survey  
   January 2022: Analyze Survey Results to improve service

6. **Please indicate how you will evaluate success of your project**

   Usage statistics and surveys will be our primary evaluation methods. Through our marketing efforts, we anticipate that these kits will be in high demand. We will establish a two-month, six-month, and one-year evaluation period to monitor how often the kits are being used and the level of patron satisfaction. This survey will also be available to front line staff at the library to give us their feedback. The kits will include a survey link that will ask how helpful the kit was, what patrons would like in the kit in the future, and whether patrons would recommend this kit to others in the community. Surveys conducted after related programs will also contribute to our evaluation. Records will be kept for the types of languages most checked out or asked for; and, at the end of the year, the instruction manuals will be updated to meet the most requested community needs.

7. **Please detail your project budget. (Note: Indirect costs are not allowed)**

   Each kit will contain a Chromebook, mouse, Chromebook bag, and coding instructions on cardstock held together by plastic rings. Physical coding instruction will allow easy of access for those with limited computer experience.

<table>
<thead>
<tr>
<th>Item</th>
<th>Per Unit Cost</th>
<th>Cost for 30 Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromebook (30)</td>
<td>$276</td>
<td>$8,280</td>
</tr>
<tr>
<td>Mice (30 purchased In bulk)</td>
<td>$109</td>
<td>$109</td>
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<tr>
<td>Chromebook Bags (3 units of 10)</td>
<td>$157</td>
<td>$471</td>
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<tr>
<td>Instruction Manual supplies: cardstock (300 sheets) and plastic rings (100 rings)</td>
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<td>$27</td>
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<tr>
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<td>Tax and E-Waste Fee</td>
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<tr>
<td>Tax = $224.00</td>
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<td>$344</td>
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<tr>
<td>E-Waste = $120</td>
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<tr>
<td>Total</td>
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<td>$9,231</td>
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</tbody>
</table>
8. Please indicate how the project will be sustained after the grant term is over

There are many ways that this project can be continued after the initial purchase of materials. The library will be able to offer online coding classes utilizing these kits. Teen volunteers will be able to use these kits to make after school coding clubs more accessible. Adults can check out these kits to learn a new coding language at their own pace. Since the basic composition of the kits is the same, coding languages can be interchanged and update, allowing patrons to keep up to date with the newest and most useful coding languages. Also, considering the large percentage of ESL patrons in Santa Clara, we could pursue translating these materials into other world languages to expand their usage. These kits will allow potential coders to disregard the difficulty of setting up coding projects and jump right into learning the essentials of coding!