1. Please provide a one paragraph project summary.

Alameda County Library (AC Library) would like to pilot a programming resource for Library Staff called “STEAM Program(s) in a Box”. This pilot will allow us to test an idea from AC Library Children’s Staff that may ease the stresses of program planning by creating several pre-made kits for Library Staff to use in their children’s programming and/or class visits. These programming kits will include a lesson plan and any supplies needed for 30+ participants and would be replenishable so that each programming kit could be used more than once. Staff will incorporate environmental sustainability principles wherever possible when choosing which projects to kit and while resourcing materials. STEAM Program(s) in a Box will be tested at Irvington and San Lorenzo Library, with opportunities for other AC Library branches to participate as well. Feedback from staff and program participants will be gathered throughout the funding period and evaluated for adjustments and expansion opportunities.

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

**Mission:** Grow learners, break barriers, build futures

STEAM Program(s) in a Box reduce barriers posed by time, budget, and expertise for AC Library staff to facilitate STEAM educational opportunities for young students. This early, low-risk exposure to basic concepts, problem solving, and the arts will provide building blocks for children to rely on as they move towards higher education and the more advanced STEAM related classes there. Kits and materials will incorporate sustainability principles wherever possible, with a focus on reusable, reclaimed, recyclable, and compostable components.

**Vision:** Kind, Connected Humans
STEAM Program(s) in a Box would have a mixture of individual and group projects. Our young visitors will be encouraged to assist one another and offer positive feedback, which will help them create connections with others.

Values:

Authenticity
The things we make help us to learn about and express our authentic selves. This will be especially true of the arts focused STEAM Program(s) in a Box.

Integrity
The Library isn’t just a place for books, it’s a place for education and entertainment. This project provides an opportunity for AC Library to show our communities that we take this adage seriously.

Creativity
Though many of the kits will have a specific finished project in mind, several will have an opportunity for creative thinking and expression. This can be especially difficult for young people who have been taught from an early age to find the “right” answer as opposed to celebrating a creative way to do things.

Curiosity
STEAM projects offer an opportunity to answer those questions we all have as we explore the world around us. The Program(s) in a Box will provide a low-risk way for youth to express and assuage their curiosity.

Empathy
Inevitably, at least one program attendee will face challenges with completing a project. Fellow attendees will be encouraged to practice empathy and help each other.

Areas of Exploration

Innovation & Cultivation
The ability to be creative and to cultivate a better future is something innate to humans. STEAM Program(s) in a Box will expose our younger members to ideas and methodologies that they can pull from as they create their own desired future.

Justice, Equity, Diversity & Inclusion
We acknowledge that Fremont is a more affluent community even as we seek to leverage the space and expertise of the Makerspace team at Irvington. We also know that San Lorenzo Library serves low income, minority communities in the unincorporated Eden Area who are thirsty for STEAM programming opportunities. This pilot will allow us to provide desired services to the youth in lower income areas, helping them to receive exposure to STEAM ideas that they may not receive in school. It will also help us to rethink and redesign programs and field trips within our better resourced communities.
Civic Participation
Fremont Unified School District (FUSD), City of Fremont, business owners, and caregivers have been vocal about the need for more STEAM focused opportunities for youth. In April 2023, Irvington displayed a poster asking the community for program suggestions. Over 90% of the suggestions were based in STEM. Several suggestions were made directly by youth under the age of 12. The caregivers often added “for kids” to those suggestions.

Additionally, community feedback sessions in 2021, as well as prior feedback from community/local government planning sessions in Unincorporated Alameda County all contained requests for STEAM education support. The community repeatedly mentioned the lack of free STEAM education opportunities within San Lorenzo Unified School District (SLZUSD). Though not directly incorporating the specific suggestions from Irvington or San Lorenzo this project is a response to the regular requests for STEAM programming from our community.

Healthy Families, Healthy Homes
AC Library believes that “Access to secure housing and food, early childhood education, and family literacy build the foundation for a healthy world.” By supporting STEAM education in our community, this project directly supports this area of exploration.

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

STEAM Program(s) in a Box will serve two very different communities in Alameda County: Fremont and Eden Area. Choosing two libraries located in such different communities for this project will allow for a more well-rounded pilot, providing the opportunity for feedback from members with a variety of backgrounds, resources, and abilities. Assuming the project goes well, it will be expanded to include AC Library locations in Albany, Castro Valley, Dublin, Newark, Union City, and Mobile and Outreach Services.

There are four libraries in Fremont, including Irvington. During AC Library’s COVID-19 library closures, Irvington began the process of transitioning to become a Makerspace with a small library inside. This decision considered the proximity of this small library to the much larger Fremont Main Library, as well as the stated goals and needs of FUSD and the City of Fremont. Additionally, Irvington is across the street from Irvington High School, which has an impressive Makerspace for its students to use during school hours. Irvington’s transition supports these students outside of school hours and provides Maker opportunities to elementary and middle school students and families.

Eden Area is a local designation given to a group of unincorporated communities in Alameda County, which include San Lorenzo, Ashland, Cherryland, and Hayward Acres. San Lorenzo provides services to residents in Eden Area. As an unincorporated area, this community does not have the benefit of City governance, relying instead on County departments to handle this role. Eden Area residents have increased their own advocacy efforts by forming grassroots
coalitions to work with various County departments, including the Library. All are agreed that the need for STEAM education and opportunities is paramount for the betterment of the community. Historically, the school districts serving the Eden Area have not been able to provide STEAM education opportunities at the caliber of surrounding school districts. The Library is not within walking distance of most schools, however it is a valued community partner and resource for families.

2021 Estimated Data from the US Census Bureau is below. Information for Hayward Acres is not designated separately from the City of Hayward within the Census information, so it is not included in this table.

<table>
<thead>
<tr>
<th></th>
<th>Fremont</th>
<th>San Lorenzo</th>
<th>Ashland</th>
<th>Cherryland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>227,523</td>
<td>30,420</td>
<td>23,640</td>
<td>15,552</td>
</tr>
<tr>
<td>Under 18 years</td>
<td>53,627</td>
<td>6,246</td>
<td>5,596</td>
<td>3,503</td>
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<tr>
<td>Population by Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>63%</td>
<td>28.2%</td>
<td>23%</td>
<td>11%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>2.3%</td>
<td>3.7%</td>
<td>14.5%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>10.6%</td>
<td>42%</td>
<td>46.1%</td>
<td>54.1%</td>
</tr>
<tr>
<td>White</td>
<td>18.4%</td>
<td>21%</td>
<td>10.3%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Other</td>
<td>5.7%</td>
<td>5.1%</td>
<td>6.1%</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Household Income and Educational Attainment

<table>
<thead>
<tr>
<th></th>
<th>Fremont</th>
<th>San Lorenzo</th>
<th>Ashland</th>
<th>Cherryland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Household Income</td>
<td>$155,968</td>
<td>$95,903</td>
<td>$71,002</td>
<td>$75,470</td>
</tr>
<tr>
<td>Graduate/Professional Degree (Age 25+)</td>
<td>64.7%</td>
<td>4.9%</td>
<td>4.6%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

A small team made up of Irvington staff and AC Library’s Family Services Coordinator will work together to identify STEAM projects that will meet the goals of this pilot. Ideal projects for STEAM Program(s) in a Box are:

- **Age appropriate** – for ages 6-11; considering concepts, interests, dexterity, and education level.
- **Expandable** – though each kit can be completed as a standalone program, it would be great if they can also lead to add-on programs. For instance, a program where attendees learn about types of rocks may have a very basic coloring sheet included or could be expanded to include model building or rock painting, or expanded even further with a guest speaker from the Parks Department discuss the types of geology found in the area.
- **Relatively simple for staff to lead** – Library staff are not necessarily teachers or scientists. STEAM Program(s) in a Box should include all materials necessary for the basic program, including lesson plans, demonstratives, consumable items, and suggestions for expansion opportunities.
- **Easily transported** – We will be using the Library’s internal courier service to transport the STEAM Program(s) in a Box. The kits will need to be a reasonable size and weight to
be included as part of the regular courier service deliveries. Courier feedback will be solicited prior to moving forward with each program kit

- **Sustainable** – preference will be given to programs made up of reusable items wherever possible, followed by reclaimed, recyclable and compostable materials.

Once the best options for STEAM Programming are identified, the planning team will present the program ideas to San Lorenzo staff for initial feedback, and to the Courier Services team to ensure their needs and limitations are met before purchasing materials, creating the programming kits and settling on the methodology for transport.

The space at Irvington is ideally situated for filling, refilling, and storing STEAM Program(s) in a Box. The proximity to the high school and FUSD’s service hours requirements for graduation promise regular assistance with some of these tasks. Statistics on the amount of time spent on these tasks will be kept to assist with evaluating the pilot for expansion.

Irvington and San Lorenzo will each host a series of STEAM Programs using these kits for 4-6 months. The kits may also be used during class visits at Irvington, due to that location’s transition away from a traditional library service model. We will gather feedback through informal interviews, surveys, and shared reflections. Feedback received will help gauge the ease and effectiveness of the individual STEAM Program(s) in a Box, and the pilot as a whole.

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

**GOAL:** Ease program planning stress and reduce waste by providing pre-made class-sized STEAM program kits for Library Staff.

**OBJECTIVES:**

- Identify and create at least six (6) complete age-appropriate STEAM-related programming kits that staff can facilitate.
- Design a procedure to replenish kit supplies quickly and easily.
- Test each Programming kit by hosting programs for 4-6 months at Irvington and San Lorenzo. Other AC Library branches may also test the Programming kits to provide additional feedback.

5. **Please include your project timeline (include detail of activities).**

**Phase I: Planning, Purchasing, and Packaging (1-3 months)**

- Identify and evaluate potential STEAM projects for inclusion
- Purchase necessary components
- Package and label the programming kits
Phase II: Programs and Replenishment (4-6 months)

- Test the Program Kits by holding at least 1 Program/Class Visit per month at each participating location
- Solicit and compile feedback after each event
- Replenish supplies as needed

Phase III: Wrap Up (1-2 months)

- Analyze feedback and comments
- Debrief with Library staff and Courier Services
- Finalize documentation
- Evaluate for expansion to other library branches

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

Each STEAM Program in a Box will include a short survey for attendees and/or their parent/guardian to complete. Though paper surveys will be available, attendees will be encouraged to complete their survey online. These surveys will be compiled and analyzed at the end of the funding period to understand how our communities responded to the programs, any new concepts they learned, and whether that specific program kit should continue to be used after the funding period ends.

After each program, Staff will record general impressions, any quotes or sentiments shared with them, strengths and weaknesses of the program kits, as well as the number of attendees for each program. Staff will be encouraged to take photos of the programs to help the planning team understand and celebrate each program.

Additionally, the planning team will meet regularly with programming staff at San Lorenzo and Irvington, as well as with Library Couriers to identify and respond to time-sensitive sticking points with sending/receiving, facilitating, and replenishing the program kits.

At the end of the funding period, the planning team will compile all information received. During their debrief, the team will analyze surveys, photos, stories, impressions, and more to evaluate the success of the project. This information will be presented to various age level services and EDI programming teams to solicit ideas for tweaking and expanding the program.

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

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEAM Programming – 6 kits (min) with hands on components for 30 students</td>
<td>$8,000</td>
</tr>
</tbody>
</table>
8. Please indicate how the project will be sustained after the grant term is over.

Upon completion of the grant term, the project will be sustained through Library funding. Regular assessments will be completed with staff to ensure that the STEAM Program(s) in a Box individually and as a whole are still relevant. The individual Program kits that are no longer appropriate will be taken apart, and the materials used in other activities. This will create room for new Program kits to be created, which will help keep this collection fresh for our members and staff.

Complete Only for Category B Grants:

9. Explain what grant was selected to replicate and why.

10. If there are changes or enhancements to the original grant, including budgetary changes, please detail the changes and your rationale for making them.

Cindy Chadwick
Cindy Chadwick Ph.D., County Librarian