The STEM in Libraries series of toolkits was published in 2018 by the Maine State Library and Cornerstones of Science. This project was made possible in part by the Institute of Museum and Library Services (grant number LG-80-15-0041-15) and the Silberstein Foundation.
The STEM in Libraries: Community Partnerships Toolkit provides resources to help you expand your library’s capacity by partnering with other organizations to offer high-quality, relevant science, technology, engineering, and math (STEM) programs.

You will learn to:

- Identify and approach partners who can help you address the STEM issues of importance to your community.
- Build sustainable partnerships that create win-win situations for both your library and your STEM partners.
- Assess and nurture your STEM partnerships so your successes can build and the partnerships can evolve over time.
- Learn from the experiences and best practices of libraries that have already developed STEM partnerships in their communities.

What’s inside:

- Tips for successful STEM partnerships
- Step-by-step guide to STEM community partnerships
- Examples of STEM partnerships
- Additional resources
Tips for successful STEM partnerships

Partnerships are both personal and business endeavors as they involve ongoing time, support, and cultivation by a library’s senior leadership and staff.

These tips provide benchmarks for assessing the characteristics and activities of your STEM partnerships. For some libraries, partnerships do not come easy, and the same is true for some science organizations. Your STEM partners, like your library, will have their own agendas, expectations, and limitations in financial and staff resources. Successful and sustainable partnerships will depend on your clarity of purpose, mutually defined roles and responsibilities, and regular, effective communication.

Do your homework

Do your research and find out what connections already exist in your community. It may be possible for your library to join an existing partnership rather than create a brand new one. This possibility might save you a lot of time and effort when it comes to identifying and recruiting partners, and even developing programs.

Clarify your purpose

A clear purpose and shared understanding of the project’s goals, activities, benefits, and expected outcomes is essential to a successful partnership.

Define roles, responsibilities, and work processes

Establish a mutual understanding of each partner’s roles and responsibilities, as well as a mutual recognition of the financial and time commitments. This understanding should include a clear work process that defines things like:

- How often will you meet?
- Who will represent each organization?
- What role will the organization’s directors play?
- What resources will be needed and who will provide them?
- When do you expect to achieve the project’s goals?

Communicate

Clear and regular communication among representatives of each organization is essential. Good communication recognizes the role of each partner in the success of the project, and gives you opportunities to discuss and resolve challenges as they arise.

Create win-win situations

It is fine—and entirely appropriate—to identify your library’s interests and potential benefits when you propose a partnership. Potential partners will be doing the same thing when they consider your proposal. Be aware, though, that leading with how the collaboration will benefit the partner will resonate more with them—and generate more buy-in—than leading with how it will benefit the library.
Partnerships are most successful when they are mutually beneficial. The more you are able to describe how the partnership will create a win-win situation, the more potential partners will be interested in building a relationship with your library.

**Assess and reassess your partnerships**

Like all relationships, partnerships can be nurtured, evaluated, and improved. Working with partners on periodic assessments can help sustain trust, build respect, and address any possible issues. These conversations can also help you understand how to deepen the relationship in meaningful ways.

**Build momentum**

It’s OK to start small. When your staff and community see tangible results of small, successful endeavors, their enthusiasm can help build momentum for your STEM programs. Initial successes can also create opportunities for you to deepen your collaborations or invite new partners to participate, and accomplish even more.
Step-by-step guide to STEM community partnerships

Before you start to form STEM community partnerships, you’ll need to consider a number of factors, including:

- The type of partnership you want to have
- Your library’s internal skills, abilities, goals, and values, as well as the resources you can devote to the partnership
- The commitment the library director and staff will be required to make for both the partnership and STEM initiative to succeed

If you aren’t the library director, it will be important to discuss these factors with your leadership before you move forward.

In successful partnerships, the benefits often significantly outweigh the effort in both tangible and intangible ways. This guide outlines the steps to success.

Step 1: Identify library needs and wants for STEM partnerships

Before you begin, you will need to determine your specific interest in forming partnerships. You’ll also need to understand the level of effort and resources you can devote to your partnerships, so you don’t overwhelm yourself or your staff and you don’t set expectations you can’t follow through on.

Assess your goals and interests

An internal assessment will help you recognize where your library’s STEM-based initiatives need additional expertise or resources, and what types of partners can help fill those needs. You don’t need a lot of partners; you need the right partners. To start your own internal assessment, see the Community Partnership worksheets at www.stemlibraries.org.

Here are some questions to ask before considering partnerships:

- What can the library do for the community?
- What STEM-based community issues are library staff and patrons most interested in? It is important for issues to be meaningful to library staff, as their passion will transfer to partners and patrons.
- What type of partnerships is the library director is interested in and willing to commit to? For how long?
- What role do the library director and staff want to play in the partnership and project?
- What types of community networks do you want the library to be associated with?

Consider feelings, skillsets, and perceptions

It is important for the library director and staff to understand their own feelings and expectations related to introducing STEM programs—especially if current library programs are more oriented toward the humanities and the library has little experience with STEM programming. Things to consider might include:
• **Staff interest and confidence in STEM.** What is the library staff’s level of interest in STEM programs? Do any staff members have specialized STEM knowledge? How confident are they in their ability to develop and facilitate STEM programs? Are they willing to explore and learn? Understanding the library staff’s interests, knowledge, and confidence in STEM will help you define existing skillsets within the library and better understand what you might need from a partner.

• **Preconceived notions about partners.** Both librarians and STEM providers may come to their first partnership with preconceived notions about the other that may or may not be accurate. Misconceptions can only be dispelled through communication, mutual respect, shared visions, and the willingness of each to understand the other’s interests and goals. Listen to your potential partners, and have the needed conversations.

### Step 2: Identify potential STEM partners

As you begin to seek out partners, you’ll employ many of the same core skills you put to work every day at the library. Community partnership building can be thought of as an extension of three essential library functions: collection development, reference, and research.

**You’ll develop your collections through partnerships.** Library science educator David Lankes has suggested that librarians view their “community as the collection.” With STEM partnerships, you have an opportunity to incorporate the resources and expertise of community partners into the library. Think of your partnerships as a way of extending the library’s collection: Over time you can build a set of partners that provide knowledge and other resources to your patrons, enriching your existing capabilities and collections.

**Reference skills will help you identify STEM topics.** Reference skills will come into play when you’re identifying STEM topics to tackle. Think of the process of defining relevant STEM issues as a series of reference interviews with patrons who aren’t sure what they’re looking for yet. To identify suitable partners, you’ll ask questions of your colleagues and community about what STEM issues interest them and what is most needed. With these answers, you’ll research sources that best address the top two or three interests and concerns.

**Research will inform your topic and partner selection.** Once you’ve identified several STEM issues of interest to the community and the library, you’ll need to do some research on the issues to determine which formal STEM providers, such as science museums, and informal providers, such as hobby groups and clubs, are already addressing the issues. These are your potential partners, the sources you’ll mine to address your community’s questions. Don’t forget to talk to the organization’s members or users, the people who are currently recipients of the organization’s programs; they can lend insights you may not have considered.

See the Stakeholder Interviews and Informational Meetings templates at [www.stemlibraries.org](http://www.stemlibraries.org) to help you find suitable partners. The following table offers ideas for places to look for potential partners in your community.
Potential sources of partners

There is STEM in all aspects of our daily lives, and there are potential STEM partners in most communities. Here are some places to look for potential partnerships.

**Businesses, professionals, and chambers of commerce.** Examples include major STEM employers; minority business owners; small business owners; human resources officers; city, county, and ethnic chambers; corporate STEM networks; car mechanics; doctors and veterinarians; and organic farmers. Libraries have partnered with STEM professionals from various fields and employers to create STEM task forces, maker mentor groups, and more.

**Community service organizations, associations, and clubs.** Examples include Sierra Clubs, health service provider networks, national and state science teachers associations, American Red Cross chapters, Kiwanis and Lions clubs, and food pantries.

**Hobby and avocational groups.** Examples include local clubs focused on astronomy, fly-fishing, archaeology, water quality, and other interests.

**Educational organizations.** Examples include preschools and K–12 schools (especially STEM magnet schools), parent-teacher organizations and homeschooling groups, community colleges, universities, and education extension offices. Also consider museums, botanical gardens, aquariums, 4-H/Cooperative Extension programs, and other libraries (such as medical and university libraries).

**Governmental organizations.** There may be opportunities for partnerships with governmental organizations at the local, state, or federal level. Possibilities include local and regional Parks and Recreation Departments, state parks and forestry services, fisheries and wildlife departments, your state Department of Natural Resources, and the National Park Service. Also explore state STEM councils, state library agencies, NASA Space Grant Consortia, NASA Challenger Centers, NOAA Sea Grant Consortia, and cybersecurity and technology organizations.

**Health organizations.** Examples include the American Cancer Society, the American Heart Association, Alzheimer’s associations, the National Institutes of Health, and local public health nurses, prosthetic companies, hospitals, doctors, and dentists.
What are STEM providers thinking?

Formal and informal STEM partners are a lot like public libraries. They too operate with similar constraints, little money, small staffs, and big goals. More than likely, they will come back to you with a cautious response because of constraints, along with a win-win requirement and an overall determination of whether the partnership will succeed or not. They too will have strong expectations and goals for a partnership.

There are a number of questions you should consider yourself before meeting with potential partners. The same considerations should be discussed with the partner before a joint project is implemented. Questions include:

- Will the partnership be able to achieve its immediate goals?
- Does each partner have the same definition of success? How will success be evaluated and measured?
- Will the partnership support the mission or increase the credibility of each organization?
- What is truly gained by this relationship? Will the results of the partnership represent the best way to use the limited time and resources of both organizations?

Step 3: Think partnership, not program

Potential STEM community partners will be assessing the library’s motivations for the partnership. It is important to be honest about the type of partnership you want to create and why. That means you need to have a clear understanding of your goals and interests for the STEM program and the partnership, because the partner will be asking you these types of questions. You also need to know what type of partnership you’re looking for.

Types of partnerships

The table below outlines two types of partnerships. There is value in both types of partnerships; however, each has a very different goal and result.

Transactional partnerships. If you want to simply trade services to achieve a specific objective—for example, a STEM provider is willing to offer a free program at the library, so the library gets a program and the STEM provider gets access to the public to promote their information—then you’re looking for a transactional relationship. This type of partnership may be appropriate in two instances:

- You “just want a program” and not to engage the partner in a long-term relationship, because the library does not want to invest in a long-term partnership at this time.
- You want to engage the organization in a limited way so you can test the viability of the partnership. Partnerships take time, effort, and resources to develop, so going slowly, starting by creating small successes together, can be an effective way to begin a relationship that may have long-term potential.

Transformative partnerships. If you want to strengthen your library’s position as a community leader, a transformative, intentional partnership can help. Here, the consideration is about what the partnership do for the community, rather than what the partnership can do for the library. You’re thinking partnership, not program.
### Examples of partnership types

<table>
<thead>
<tr>
<th>Transactional partnership</th>
<th>Transformative partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bellingham Public Library, (Bellingham, Mass.)</strong> partnered with the New England Electric Auto Association to encourage learning about the science of electric cars. Each partner provided program resources, such as staff, and both partners succeeded in reaching new audiences.</td>
<td><strong>Jesup Memorial Library (Bar Harbor, Maine)</strong> initially partnered with Jackson Laboratory on a facilitated film series focused on personal genetics and ethics. This program was a success for both partners, and it led to a deeper relationship between the organizations.</td>
</tr>
<tr>
<td><strong>The library:</strong> Librarians provided the Auto Association with a venue for their STEM program, and in return, the library was able to reach new audiences with an interest in electric cars.</td>
<td><strong>The library:</strong> Two scientists now serve on the library’s board of directors. Also, the library helped Jackson Laboratory to conduct research and create a high school curriculum on dog genetics: they invited community members to have their dogs genetically tested and also hosted a series of talks on the history of dogs.</td>
</tr>
<tr>
<td><strong>The partner:</strong> The Auto Association was able to deliver an educational program at no cost. Representatives helped the library organize and promote a show of electric vehicles and held a panel discussion on the science of electric cars.</td>
<td><strong>The partner:</strong> With the library’s assistance and community involvement in the dog genetics program, Jackson Laboratory was able to create a large, genetically diverse sample size that became the basis of their research and curriculum.</td>
</tr>
<tr>
<td><strong>The partnership</strong></td>
<td><strong>The partnership</strong></td>
</tr>
<tr>
<td>• The partnership was a simple “give and take” relationship.</td>
<td>• The partners created common goals, projects, and products.</td>
</tr>
<tr>
<td>• Partners traded resources they already have.</td>
<td>• The partners combined resources.</td>
</tr>
<tr>
<td>• Neither organization was much changed by the exchange.</td>
<td>• The relationship expanded institutional capacity as well as programming.</td>
</tr>
<tr>
<td></td>
<td>• The partners created a cobranded set of programs, deepening the commitment to the relationship.</td>
</tr>
<tr>
<td></td>
<td>• The emphasis was on the relationship as much as the program.</td>
</tr>
<tr>
<td></td>
<td>• Both organizations were changed as they worked together: They learned and grew. Both were able to increase their presence and impact in the community.</td>
</tr>
</tbody>
</table>
To learn more about the Jesup Memorial Library and Nevins Public Library’s partnerships, see the Examples of STEM Partnerships section of this toolkit.

**Partnership values**

At its most basic level, a partnership is formed by two or more people from different organizations that share a common vision or goal. The success of a durable STEM partnership is based on shared values.

<table>
<thead>
<tr>
<th>Characteristics of sustainable partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A partnership is not sustainable when...</strong></td>
</tr>
<tr>
<td>It only benefits one of the partnering organizations.</td>
</tr>
<tr>
<td>Lack of trust and respect negatively impacts the partnership by creating uncertainty. Lack of reliability and transparency limits the potential of shared programs.</td>
</tr>
<tr>
<td>One partner pays for or donates products or services to the other without reciprocity.</td>
</tr>
<tr>
<td>Lack of recognition of the partnership undermines sustainability, limits the overall value of the initiative to the community, and weakens the relationship.</td>
</tr>
<tr>
<td>The library is thinking program, not partnership.</td>
</tr>
</tbody>
</table>
Step 4: Meet with potential partners

Your internal library assessment will have determined:

- The resources required for a successful partnership, including time and effort.
- The STEM-based topics of most interest to staff and patrons.
- The leadership role your library wants to play in addressing these community issues.
- Potential partners with the credibility, experience, and knowledge required to reach those who want to learn about or are affected by the issues you’ve identified.

Now you’re ready to approach your potential partners.

**Partnership logistics**

**Reach out.** You can start conversations with potential partners by reaching out via phone or email, or through a mutual friend or colleague. Partnership opportunities can begin at any level of the library, or they can be initiated by the other organization. Based on your confidence level, time available, and understanding of the organizations you’ve identified, you may choose to meet with potential partners individually or to bring a number of organizations together to discuss goals and opportunities. Remember, the important thing is the *quality* of partnerships, not the quantity.

Because partnerships mean commitment of staff time and resources, it will be important for the decision-makers in both organizations to be directly involved in the formation of the partnership from the beginning. Make sure the leaders of your library and the potential partner organization both have a one-page overview of your STEM initiative, including an explanation of why the particular issue or topic you’ve identified is important to the library and the community.

**Prepare for success.** Whether you meet with potential partners one-on-one or as a group, it is critical to prepare for the meeting and define what will make it successful. Be careful not to focus on how the library can benefit; rather, focus on what you can accomplish together to serve your community. The first meeting is about getting to know each other and identifying common values and visions. If you can accomplish this up front, you’ll be laying the foundation for a solid partnership. See [www.stemlibraries.org](http://www.stemlibraries.org) for templates of agendas, scripts for reaching out to potential partners, and other useful information.

**Follow up.** Strong partnerships begin and end with communication and mutual respect. Establish a channel for communication so you can share timetables and information, define roles and responsibilities, and discuss how decisions will be made together. Open communication will lend clarity to the partnership and build understanding and trust. Meet on a regular basis. Promptly share any notes and documentation of decisions and actions. And follow through on your commitments.
Partnership characteristics and behaviors

A successful partnership will exhibit the following shared characteristics and behaviors.

- **Aspirations.** Partners will share a common definition of their aspirations related to a STEM issue or topic of interest to the partners and the community.

- **Intentionality.** Partners will have a clear understanding of each organization’s motivations and goals, as well as the commitment of each organization’s leadership.

- **Authenticity.** The partnership will be based on sincerity, passion, and a shared belief in the value of the relationship and the importance of the issue you will work on together.

- **Accountability.** Partners will be committed to pursuing meaningful issues, setting realistic expectations for change, making progress, and keeping promises as they follow through on responsibilities.

- **Learning.** Partners will share information and learn from one another. Both learn and grow as they build their vision, visualize end goals, define the “win-win” relationship, and experience the value of the partnership in the short and long term.

- **Engagement.** As partners explore opportunities together, they may engage in a variety of ways: one-on-one, as part of a network of organizations with similar missions or interests, and/or in a dialog with multiple organizations and the community about issues of importance to all.

Shared vision and benefits of partnership

The rewards of partnership can be profound. Along with a discussion of your shared vision, it can be worthwhile to review potential benefits from the viewpoint of each partner, so both of you will understand the other’s motivations and see what success will look like from your partner’s perspective.

Below are some of the rewards of a successful partnership—for the partners as well as the community. Benefits can include increased capacity and funding as well as stronger community support and a heightened perception of the library as a local STEM hub.

**Capacity building.** A partnership can increase both the short- and long-term capacity of each organization. New organizational capacities and individual capabilities can take different forms, including increased library programming related to STEM issues, organizational network development, and staff professional development (building STEM knowledge, practicing outreach, developing communication skills, etc.).

**New funding opportunities.** A partnership can increase access to potential funding and in-kind services and support. Donors, foundations, and other sources of charitable giving will be looking at the quality of a collaboration when they consider supporting a program. Funders may prefer to support a strong partnership rather than a new and possibly redundant program that can seem fragmented or competitive.

**Stronger networks and public support.** In your community, a strong partnership can build grassroots connections, increase credibility, and generate positive public perceptions. Your library may earn a new “seat at the table” in key community meetings, and greater visibility can increase awareness of your interest in STEM and lead to new partnerships and opportunities. It all starts with public awareness that you’re interested in being an active partner in the issues and the solutions.
**Positioning of the library as a STEM hub.** A successful STEM partnership can begin to position your library as a hub for STEM learning in the community. The library's role as a community hub is one of the primary assets the library can bring to a partnership, while STEM partners bring specialized resources, expertise, and knowledge. Over time, community leaders and members—as well as potential new partners—can begin to see libraries as ideal venues for STEM programs and library staff as strong allies in the scientific community's efforts to get needed resources and information to the public.

**Step 5: Partnership assessment and recognition**

The need to be completely honest about all aspects of the partnership begins at the moment you reach out to potential partners. Partnerships are about the cultivation and management of relationships. Make recognition and reflection a part of every interaction. This kind of communication allows you and your partners to keep moving forward, knowing where you stand and where you are going together. Within the context of a meeting, the leader can encourage conversations of assessment and recognition. Here's what that might look like:

[Recognition]

**At the beginning and/or end of a meeting, the leader might say,** “I’d like to take time recognize some of the good efforts so far. For me, I appreciate the notes being sent in quickly. They have allowed my organization more time to take care of important steps of the project. Does anyone else want to recognize anyone’s efforts?”

[Assessment]

**At the beginning and/or end of a meeting, the leader might say,** “I’d like to check in with everyone on how we’re doing. Any aha’s? Any issues? Is there anything we should change about how we’re working together? How are we doing?”

**At the end of the project, the leader might ask,** “What did we do well together and what areas need improvement? What actions do we need to take together to move forward with this partnership?”
Definitions and measures of success

How will you know if your STEM partnership is successful for your community? Here are some general ways to view success:

- **Meaningful connections are made.** Your partnership with a STEM provider connects your community with ideas and experiences that are engaging and meaningful.

- **Relevant issues are addressed.** The activities conducted through the partnership reflect the community’s needs and interests in intentional ways.

- **Momentum builds.** The community can see tangible results of the partnership’s initial endeavors, and that enthusiasm builds momentum. You and your partners have new opportunities to deepen collaborations, include new partners, and accomplish more.

To measure your success, you’ll need to look at specific indicators. It is important to evaluate the success of the partnership as well as the program outcomes. The definition and level of success will be unique to each partnership.

As with project evaluation, defining success starts at the beginning of the partnership with identified activities and outcomes. The Partnership Effectiveness Table below is modified from Cheryl L. King’s *Partnership Effectiveness Continuum: A Research-Based Tool for Use in Developing, Assessing, and Improving Partnerships.* This self-assessment is designed to provide clear descriptions of indicators that can be assessed, helping you develop and maintain effective partnerships. A downloadable version is online at [www.stemlibraries.org](http://www.stemlibraries.org).
## Measuring partnership effectiveness

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Criteria</th>
<th>Highly effective</th>
<th>Effective</th>
<th>Partially effective</th>
<th>Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission and beliefs</strong></td>
<td>A shared mission and set of beliefs serve as guides for the work of the partnership.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collaboration among partner organizations is characterized by deep trust, mutual respect, and regular and effective interaction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shared goals</strong></td>
<td>Goals:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are clear and measurable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Address the common needs of the partnership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Align with each partner organization’s goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are mutually beneficial to the partner organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Extend beyond the boundaries of partner meetings and are sustained over time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shared leadership and engagement</strong></td>
<td>Leaders of both organizations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Share accountability for achieving partnership goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Encourage stakeholder engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Share partnership decision-making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Attend and actively participate in meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Integrate partnership values into the fabric of their respective organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Partner-ship agenda and logistics

<table>
<thead>
<tr>
<th>Agenda and logistics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Are jointly created and supported by all partner organizations</td>
</tr>
<tr>
<td>- Address identified partnership needs and priorities with a plan to accomplish short-term objectives and a pathway for long-term goals</td>
</tr>
<tr>
<td>- Are fully resourced (e.g., time, people, budget)</td>
</tr>
<tr>
<td>- Support the partnership</td>
</tr>
<tr>
<td>- Include agreed-upon meeting schedules and processes for documenting and disseminating meeting notes and following up on action steps</td>
</tr>
</tbody>
</table>

### Action plans

<table>
<thead>
<tr>
<th>Plans:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Articulate concrete action steps for accomplishing partnership goals</td>
</tr>
<tr>
<td>- Include timelines, roles, and responsibilities</td>
</tr>
<tr>
<td>- Regularly communicate progress</td>
</tr>
</tbody>
</table>

### Progress measures and assessments

| Partners agree on performance measures that will be used to assess progress. |
| Data is used to assess partnership effectiveness. |
| Partners use evidence-based evaluation measures to promote continuous improvement. |
| Partners are engaged in assessing their own progress on a regular basis. |
Examples of STEM partnerships

Below are a few examples of partnerships between libraries and STEM-based organizations that addressed relevant local issues for their communities.

Demystifying genetics

**Library:** Jesup Memorial Library, Bar Harbor, Maine

**Issue:** Demystifying genetics for the community

**Partner:** Jackson Laboratory

**Programs**
- **Year 1:** Genetic Tales, a scientist-moderated film series on key research being conducted at Jackson Laboratory.
- **Year 2:** Genetic Tails, a collaboration with researchers to create a dog characteristic database that could be used as a teaching tool for high school students. Members of the public brought their dogs to be tested, so their data could be added to the database. There were also several talks on dog evolution and a big reveal of each canine citizen’s heritage.

**Partnership development:** The library director and program director met with Jackson Laboratory’s education department to plan specific programs, define roles and responsibilities, and develop shared marketing and communications. The partnership has continued over time.

**What made the partnership work?**
- The library had a clear concept for the partnership that benefitted both organizations. This led to meaty programs and positive visibility for both the library and the STEM provider.
- The library was clear about roles and responsibilities, available resources, and why they wanted to partner with the laboratory.

To see how the Jesup Memorial Library’s relationship with Jackson Laboratory can be understood as a transformative partnership, see the *Examples of Partnership Types table* in Step 3 of this toolkit’s Step-by-Step Guide to Sustainable STEM Community Partnerships.
Environmental literacy

Library: Bellingham Public Library, Bellingham, Massachusetts

Issue: Environmental literacy: an overview of city issues, including water resources, alternative energy, and recycling

Partners: The New England Electric Auto Association, a town recycling and trash collection vendor, MassSave, the local Department of Public Works, the town planner, and the Aldrich Astronomical Society

Programs
The library hosted a Star Party to announce the environmental literacy programming and introduce the community to a new, loanable library telescope.

Environmental literacy programs included:

- An electric car show and panel discussion about the science of electric cars—how they work and how they save energy.
- Programs on how to effectively recycle and what happens to trash and recycling after it is picked up from homes. The programs highlighted financial incentives available to homeowners for energy efficiency.
- A water cycle program for youth.
- A program on tiny houses, including the pros and cons of creating small, energy-efficient living spaces.

Partnership development: When the library received a grant to develop this program, librarians invited community partners to a group meeting to learn about the program and discuss ways to collaborate. Lunch was provided as an incentive, and there were a total of eight attendees. Once the partnerships were established, email correspondence was used to communicate the progress of programs. Many of the partners are continuing to work together, even after the conclusion of the grant.

What made the partnership work?

- Librarians looked for the mutual benefits of promoting both the mission and the organizations.
- Librarians received feedback from community members and patrons related to their science interests. This input was conveyed to the partners to further develop and refine programs.

To see how the Bellingham Public Library’s relationship with the New England Electric Auto Association can be understood as an effective transactional partnership, see the Examples of Partnership Types table in Step 3 of this toolkit’s Step-by-Step Guide to Sustainable STEM Community Partnerships. (Note, though, that the library’s partnership with the Electric Auto Association was one element of a larger STEM initiative on environmental literacy, which included multiple partners.)
Water quality and conservation

**Library:** Nevins Memorial Library, Methuen, Massachusetts

**Issue:** Water quality and conservation—creating a connection to nature while living in an urban environment

**Partners:** Merrimack River Watershed Council, Methuen Arlington Neighborhood Afterschool Homework Center, Essex Community College Speakers’ Bureau, and Methuen Area Homeschoolers

**Programs:**
The partners created an exhibit that traveled to all libraries in Massachusetts and New Hampshire along the Merrimack River, raising awareness of the need to protect a local river and watershed. Scientists from Merrimack Water Council traveled with the exhibit.

**Partnership development:** Partnerships were developed as a result of brainstorming ideas with local groups interested in doing a project related to water conservation. Ten organizations were invited to the initial meeting, and three people from two organizations attended. The result was the development of a durable partnership with the Merrimack River Watershed Council. The library also reconnected with existing partners to involve them in this new project.

**What made the partnership work?**
- Ongoing communication and in-person meetings kept the project on track and moving forward. The partnership required a large time commitment, but it was worth the effort. The end result was a traveling exhibit that reached multiple libraries and communities.
- Working with Methuen Arlington Neighborhood was a reminder that every longstanding community relationship needs to be infused with new ideas that benefit the changing needs of both organizations. New endeavors take time to grow.
Additional resources

Partnership development

- **“Taking Community Partnerships to the Next Level,”** a webinar presented by Audrey Barbakoff for WebJunction, 2018.

Partnership evaluation

- **“Measuring Partnership Effectiveness,”** a downloadable version of the tool provided in the Partnership Assessment and Recognition section of this toolkit.
- **Partnership Effectiveness Continuum: A Research-Based Tool for Use in Developing, Assessing, and Improving Partnerships**, by Cheryl L. King (2014). Waltham, MA: Education Development Center, Inc.