



This project was made possible in part by the Institute of Museum and Library Services (grant #LG-95-17-0046-17)

Library Innovation Studios Project Evaluation Summary

This report is made up of four sections that contain information related to the following information and data gathering tools. Quotes received by makers, participating library directors, and local team members are included in each section.

Section One -- Library Innovation Studios Certification Database (trained/certified makers)

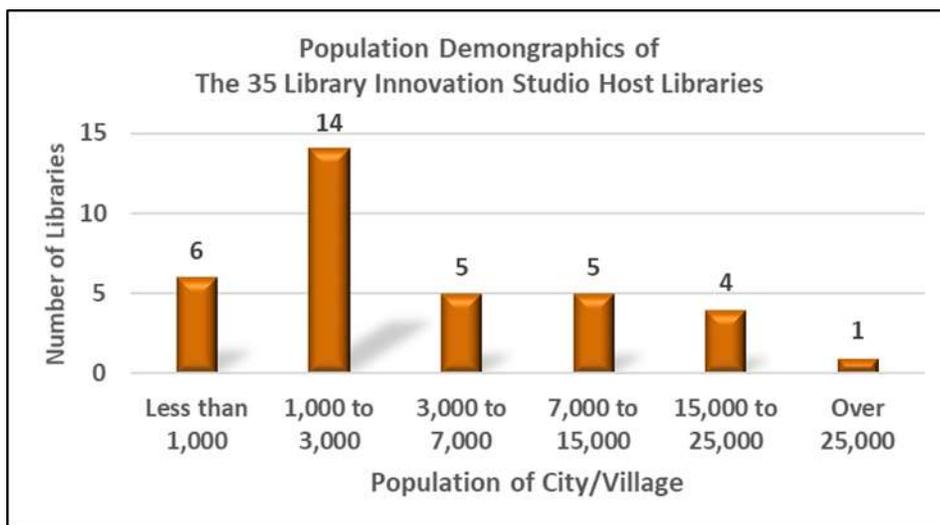
Section Two – Directors’ Surveys (directors of the 35 libraries that hosted a Library Innovation Studio)

Section Three – Makers’ Survey (trained makers contained in the Certification Database)

Section Four – Community Action Team Members’ Survey (team members associated with the 35 host libraries)

Population Demographics of the 35 Library Innovation Studios Host Libraries

The *Library Innovation Studios: Transforming Rural Communities* project used makerspaces, hosted by 35 rural and small libraries for 20 weeks, to support participatory learning experiences by providing access to makerspace equipment. Although nationwide small, rural libraries exist in communities less than 25,000 residents outside of more populated areas, in Nebraska because we have so few communities that have a population above 25,000—we really were placing these robust makerspaces in communities with small populations. Although we were hoping that several would establish permanent makerspaces, we were surprised at the overwhelming results related to this goal. Here is the population breakdown of the 35 host public libraries.



“This program is great because a small town like ours would never have been able to buy the equipment when so few people had enough experience to want to fund the project. Now we have enough awareness in the community that we will be able to ask for funds to buy the equipment for our own makerspace.”

“A special experience for a small-town library!”

Section One: Library Innovation Studios' Certification Database Summary

We asked host libraries to enter the individuals trained (certified) on the various Library Innovation Studios makerspace devices into a statewide database. The following charts summarize the information contained in the Library Innovation Studios' Certification Database.

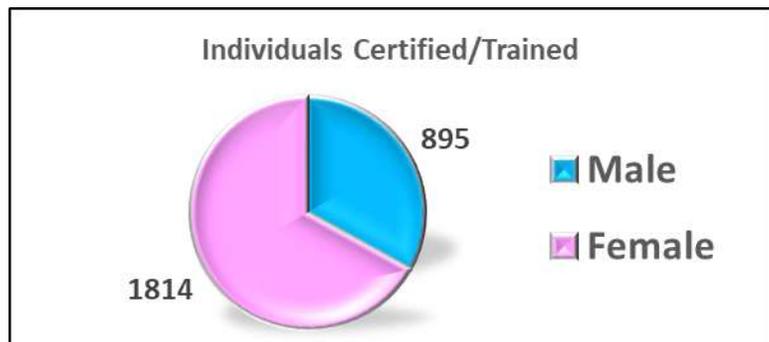
Library Innovation Studio Certification Database Statistics	
2,709	Individuals Trained (non-duplicated headcount)
7,797	Individuals Trained on Machines (duplicated headcount) (a person that was trained on 3 machines was counted as 3)
2.9	Average number of machines an individual trained on
77	Average number of unique individuals trained at a host library
223	Average number of individuals trained on machines at a host library (duplicated headcount)
174	Number of resident cities certified Individuals reside in
11	States* (besides Nebraska) trainees reside

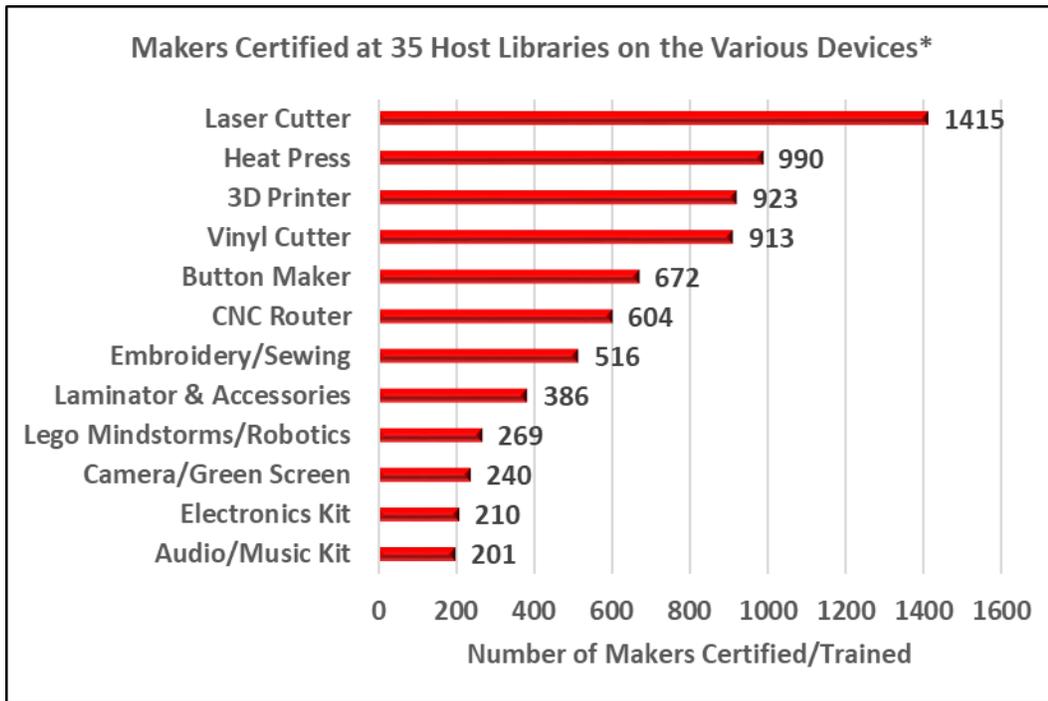
* Other states besides Nebraska that were represented by those that were certified included: Arizona, Colorado, Iowa, Kansas, Louisiana, Maine, Missouri, New Mexico, Oklahoma, Pennsylvania, and Wyoming. (We believe that this indicates that residents saw the makerspace as a community "quality of life" feature they wanted to share with visiting friends and family.)



* Although the ages of makers were not entered into the certification database, we did ask libraries to enter whether the person could operate the makerspace device "supervised" or "unsupervised." Because the age to operate devices unsupervised varied from machine to machine, we believe that the majority of those entered as "supervised" were around 16 years old or younger.

"This is a great opportunity for communities. I didn't realize the time frame that the makerspace was at our library and my children were so disappointed when I told them it was moving to another library. We were thrilled to see our local community provide financial assistance to purchase some of the equipment for permanent residence at our library!"





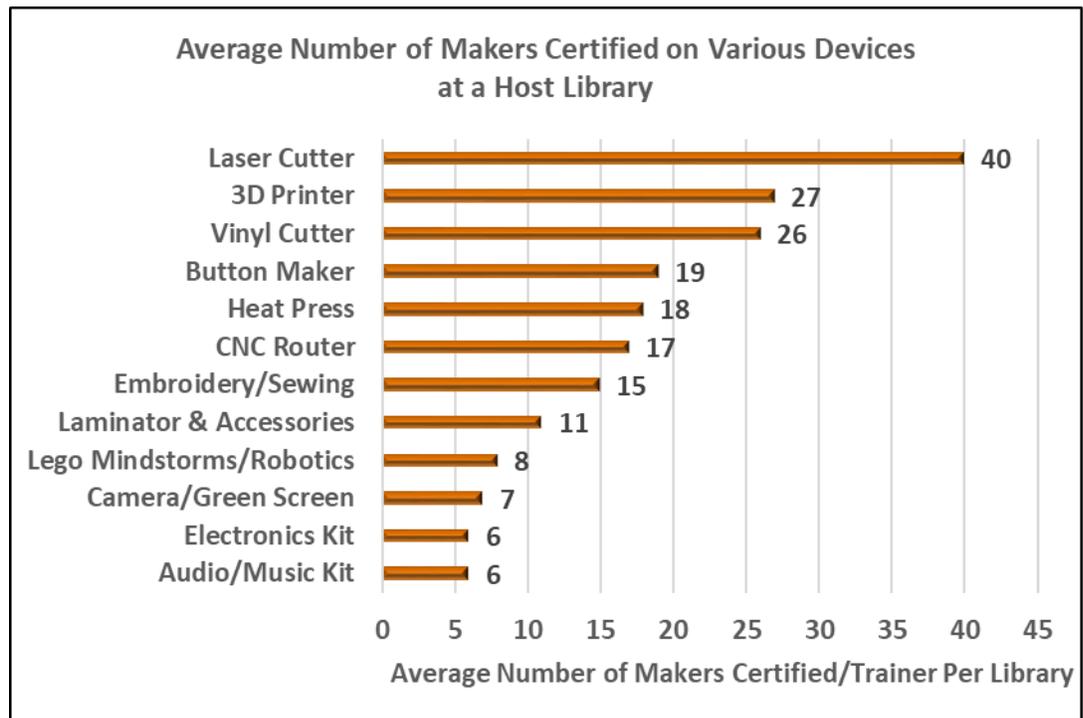
“Great idea and I heard wonderful things about it in the community. Continue trainings and purchasing equipment.”

“I hope all of it can be purchased by the library. I saw so many people using and creating with the other equipment that it was so fun to go in. I was wanting to try out other machines and projects - just ran out of time!”

* Makers were also trained on CorelDraw (required for users who operated the vinyl cutter, laser cutter, and those who created/edited designs used with the heat press and specialty ink printers). However, these trainings were not tracked in the certification database.

“I am retired. The people I shared the items I made were very pleased. Even my granddaughter wondered how I made the coasters. The times I was there making, there were always others using the machines. The project was well rounded to serve people of all ages.”

“Great! I made so many awesome things. I miss it!!”



“Appreciate the opportunity to experience and train on a variety of these machines. While training patrons I observed many repeat patrons using several machines almost daily.”

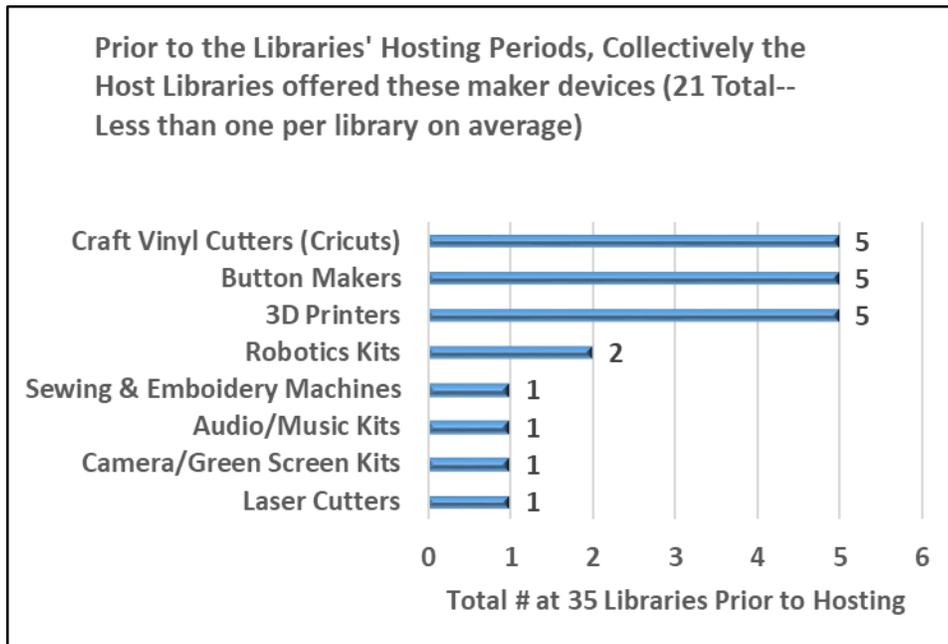
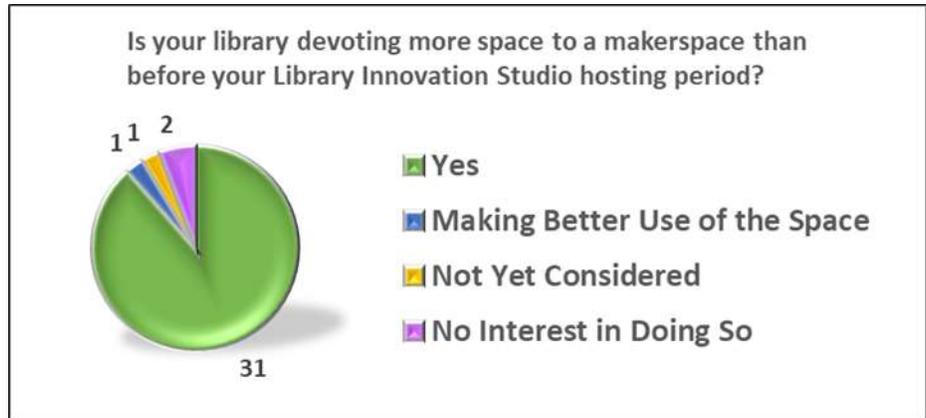
“4-H Clubs utilized the equipment for projects. We were also able to showcase the equipment at the KBR Career Day for Keya Paha, Brown and Rock Counties. Individuals were able to enhance their business.”

Section Two: Surveys Conducted with the 35 Host Library Directors

This section reflects the responses contained in the surveys conducted with the directors of the 35 participating libraries that hosted a Library Innovation Studio for a 20-week period. (Due to the issues related to the pandemic, later hosting periods were extended.) Many of the library directors received the surveys a second time to discover additional progress they had made over time (additional machines acquired, additional space dedicated to a makerspace, new fundraising or budgeting).

“Our community now knows what a Makerspace is and all the great items you can create with different machines. People love to create and learn new things. Covid-19 slowed us down but we are slowly getting back to people coming in and using the machines again.”

“Since hosting, we moved into our new library that includes a maker space.”



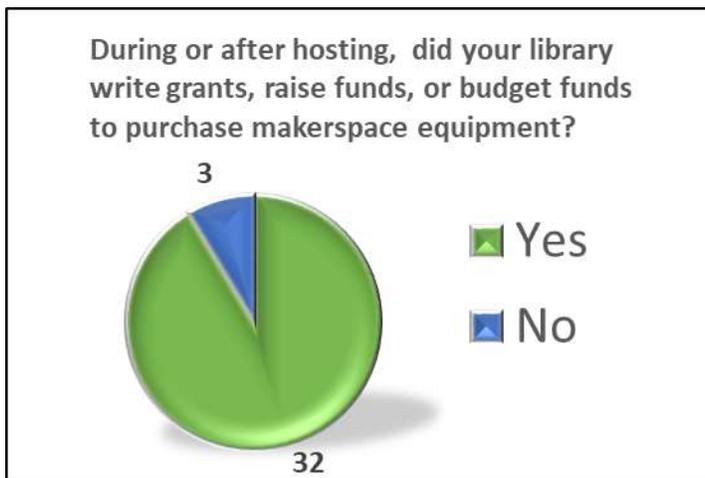
“Thank you for the opportunity to host a Makerspace in our Library! It has been a lot of hard work. With covid stuck in the middle it is still a challenge to get folks back into the library. However, interest is growing. Thank you so much for allowing us this experience!”

“So grateful for the opportunity for our library! We have made many changes and hope to continue in this direction as well!”

“We appreciate the training classes, videos etc., policies, and procedures—it helped immensely to get our makerspace up and running.”

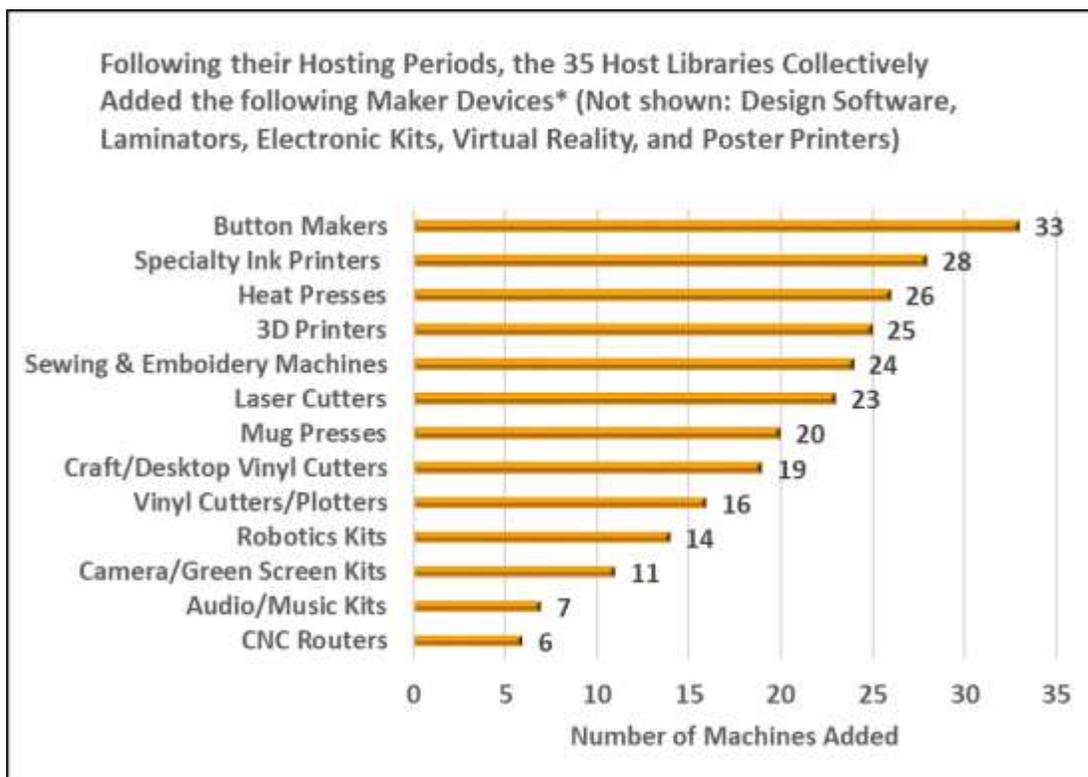
“Participating in the studio project gave us the basic framework we needed to pursue a permanent studio at our library. Having policies, procedures, and experience was so important in getting our new project off the drawing board and into a reality.”

“We loved the opportunity to host the equipment when we did. We had so many people interested in the equipment that when the opportunity to have our own makerspace came about, we didn't hesitate to take on one in our library. The Studios Project was pivotal to the success of the permanent makerspace at our library. If it hadn't been for members of our community learning and enjoying the technology from the Project, we would have never been able to afford the equipment needed for the makerspace we have today. The community truly invested in a makerspace due to the Project.”



“People enjoy the equipment. I thank you for introducing our library to the World of Maker Space. It has open new opportunities for us.”

“It was great to show the community what the library can do and have besides books.”



* We estimate the value of the machines acquired by the 35 host libraries to be over \$450,000—an average investment of \$12,850 in equipment alone.

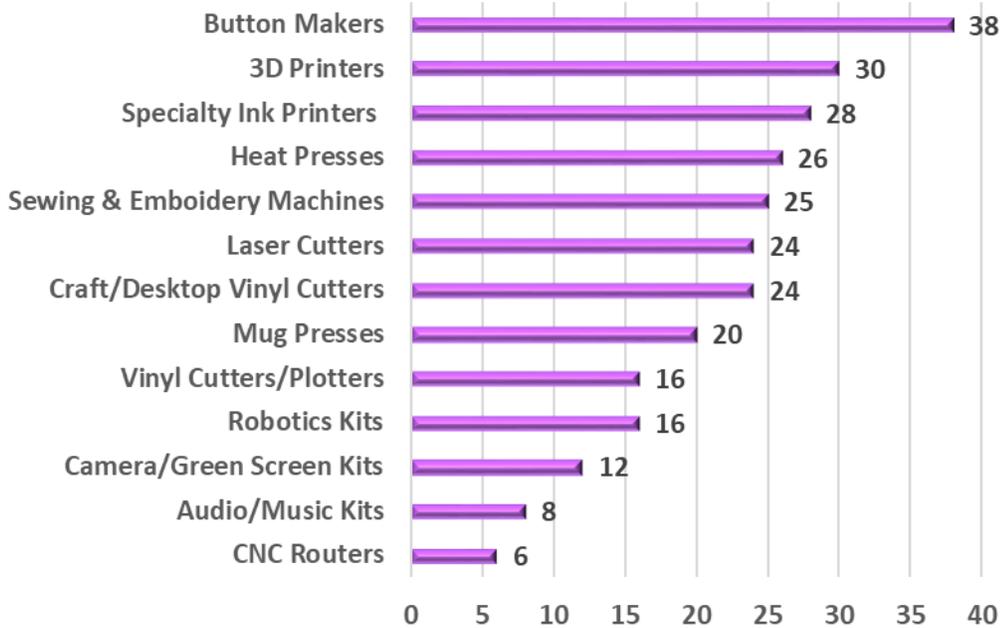
“The Makerspace Studios Project was a great new feature for our public library and one that I am very happy that we applied to. Libraries are constantly "remaking" themselves and this was a unique and popular addition to library services. Thank you!”

“We are very grateful for the Nebraska Innovation Studios Project. Without our experience hosting, we would have had a much harder time defining and explaining our makerspace goals in the community. It definitely helped us connect with a segment of our community that we don't always see for traditional library services.”

“This was a wonderful experience for the Bellevue Public Library. Our community had a chance to explore new technologies, use their creativity in a myriad of ways, and also put technology to practical uses to improve their lives.”

“We have a patron that used our equipment that has now purchased her own and is going to open a Main Street business.”

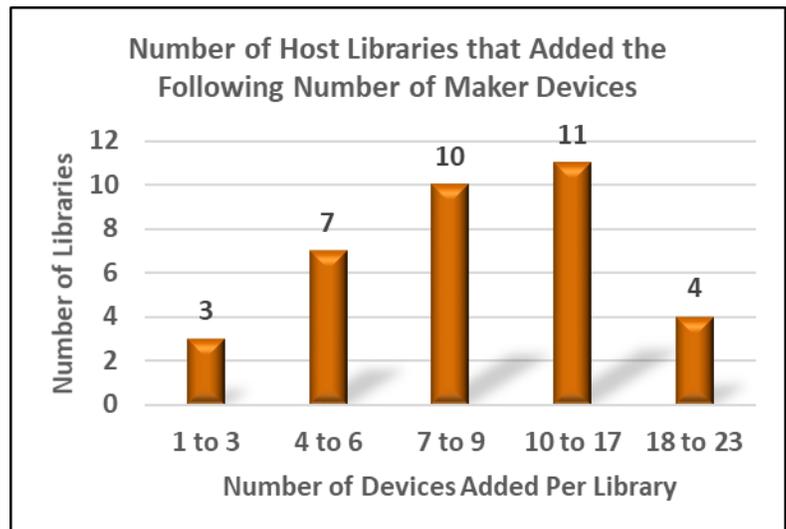
At the end of the Project, the 35 Host Libraries Collectively Have the following Maker Devices (Pre + Post Purchases)



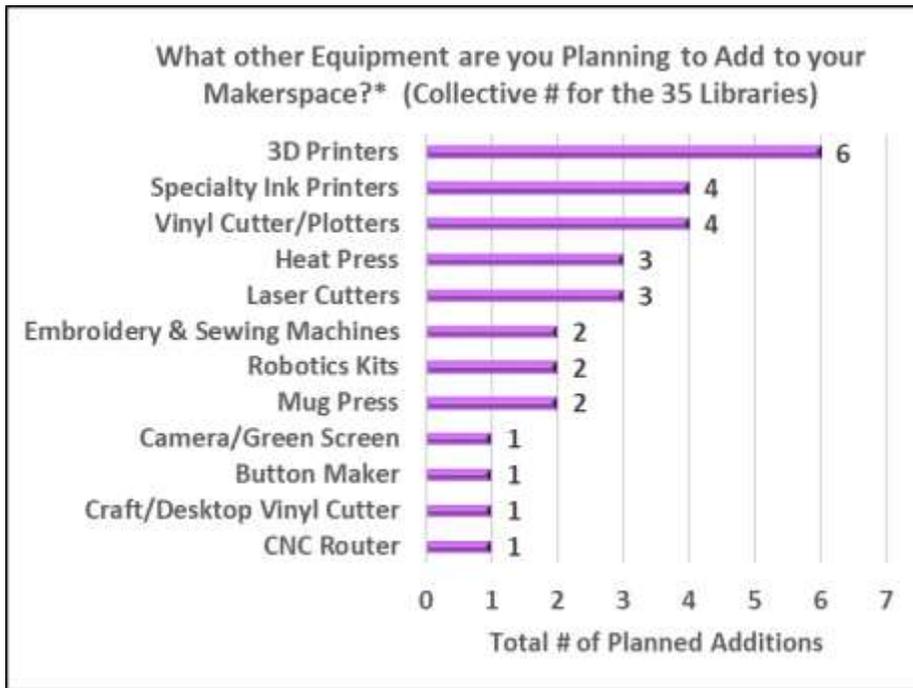
“The Innovation Studio is a wonderful way for libraries to “test run” a makerspace. Our permanent makerspace is an incredible way to provide the community with access to equipment they normally wouldn’t have access to, and we all enjoy being creators in the library! The makerspace has also really upped our display game around here, and library staff have enjoyed using the equipment.”

“By hosting the Makerspace Studio, our community became aware of creative and fun equipment they otherwise wouldn't have known about. By participating in the Studios Project, the library staff/board/city council have been enlightened in a new way that the library can serve our community. Community members who previously have not utilized our small library have now been engaging in these alternative programs due to our new makerspace equipment.”

“This was a wonderful opportunity. I hope more libraries take advantage of this unique program.”



“Hosting the Studios Project was instrumental in our library being able to create a permanent makerspace within our facility. By the time we were doing fundraising, talking to our City government, etc. We had the numbers to back up the argument for the necessity of a makerspace for our community. It helped a tremendous amount that our Studios Project was such a huge success. It was also well advertised throughout our community. Participating in the Studios Project was integral to our library being able to pursue creating a permanent makerspace in our facility. The tremendous support and momentum that we received by hosting a temporary makerspace paved the way for the top-notch one that we have today in our facility. The lessons learned and the experience gained from the Studios project, were key in the decisions that we made while we were deciding what equipment to purchase, where to place it, and the policies/procedures that we decided upon.”



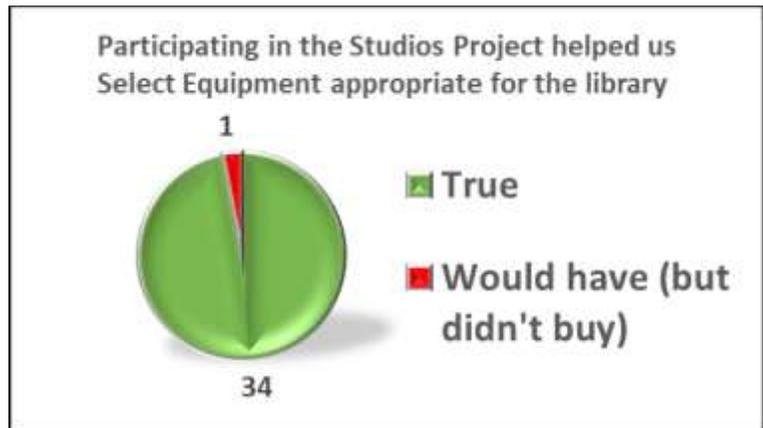
* When first surveyed these numbers were higher. However, since our project was extended and many libraries had additional time to make progress, many have already acquired the majority of the devices on their "wish lists."

"By participating we were able to see which equipment our patrons would like to see and use in our library. Thank you to IMLS and NLC for this great opportunity to being able to participate in the Innovations Studio project."

"This experience was wonderful and helped me learn how to develop our space and help define a path moving forward with the space. It changed my outlook on almost everything. The organization (The SOP binders, the training, and record keeping) helped us out the most. We had equipment, we just didn't know what to do with it!"

"I am so grateful to have the opportunity to host this project. It really helped me decide to jump onboard to add equipment. The innovation studios was a wonderful time to learn the equipment. It helped to decide what we wanted to purchase."

"This was a great way for small libraries to try out these machines and see if they will work in the future for them. It was great for the community to see another side of the library."

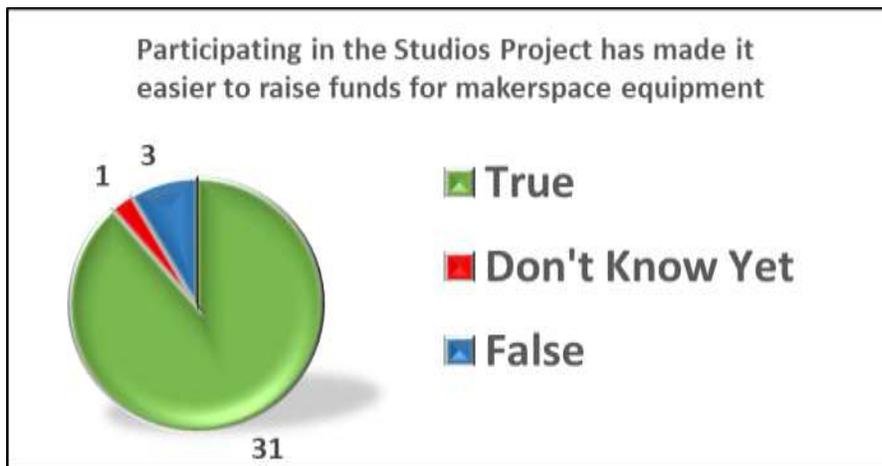


"Partnering with local youth organizations and the school provides great exposure for a makerspace."

"The opportunity to offer these high-cost equipment options to our rural community was incredible, and the people we were able to get into the library to learn about and use the equipment were amazed at the opportunity."

"It was a great experience."

“Participating in the LIS Project enabled our community to be exposed to equipment and concepts not afforded before. Without the makerspace opportunity, it would have been more challenging and time consuming to acquire a space/ concept for our library. Hosting provided our budget supporters an opportunity to experience first hand how vital a makerspace is to our community.”



“The Studio was a great program that I was very happy to be a part of. It helped us to open doors for patrons that they never would have had before. Thank you for all your hard work, you guys are awesome! I am grateful that we had the opportunity to participate in this endeavor. The Studio led to the Kimball Public Library adding a makerspace of our own and two years later it is still used regularly by patron and staff. I eagerly await the next project like this that we will be able to be a part of.”

“We would not have a makerspace if it hadn’t been for the Studios Project.”

“We did not move forward with a permanent makerspace. However, the opportunity and the access to the equipment was an excellent try before you plan, buy and partner opportunity. NLC staff was great and supportive. The entire idea/concept was Fantastic!”

“The space limits within our current building have shown the impracticality of having a permanent makerspace. The experience was appreciated, but the community response, although it was positive...did not result in regular use or interest. We did purchase some of the lower cost options to have access to though.”

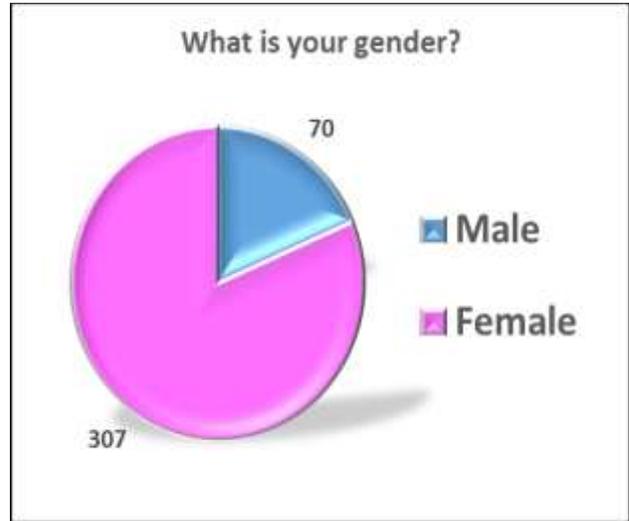
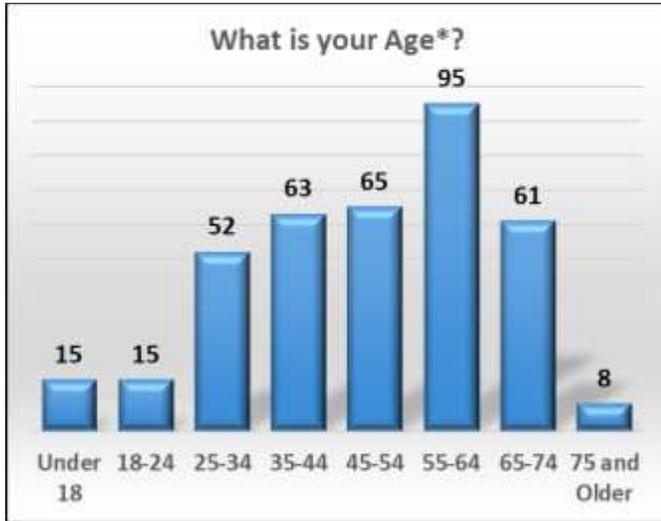


“Participating in the studios project was an excellent learning opportunity not only for the community but for the library staff. Learning how things worked, what our community liked best, and what the effort, training, and maintenance would be for the equipment was invaluable. It removed some of the fears staff had about expense, time, and the feasibility of having a makerspace. We realized that we really could do this and learned what it would take for it to be successful in the long run.”

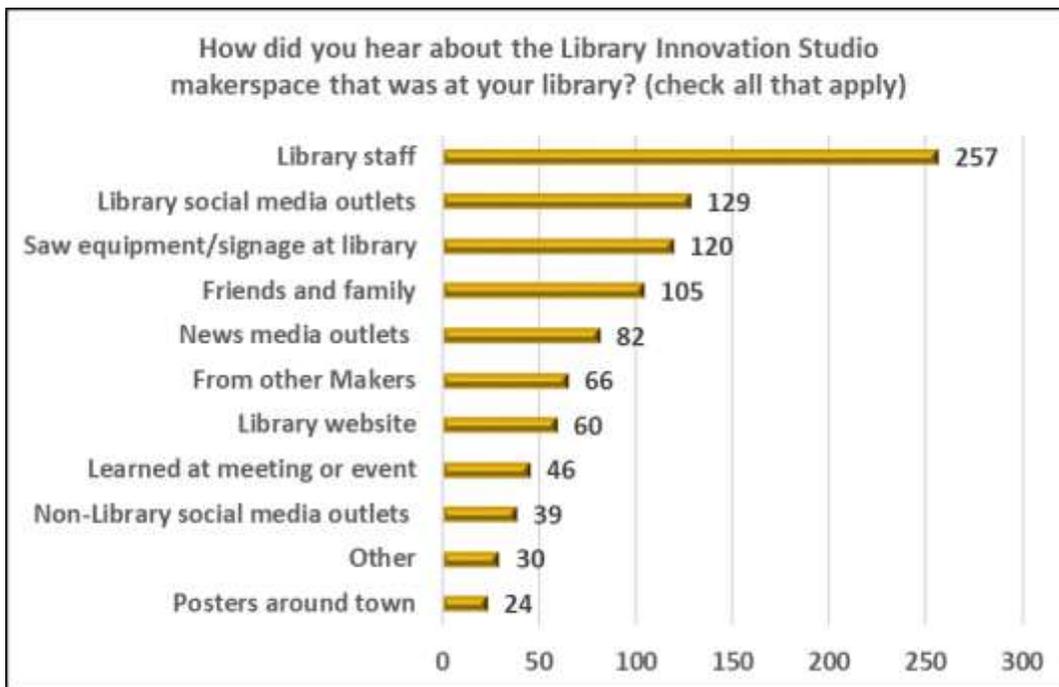
“We are still very grateful you accommodated a few of us smaller libraries as micro-studios!”

Section 3: Surveys Conducted with the Certified Makers

Section Three reflects the responses received from the surveys completed by makers that were certified (trained) at the 35 host libraries. Because library staff and volunteer trainers were initially trained on the machines and certified, they were also in the Certification Database, and received the “Maker” survey as well.



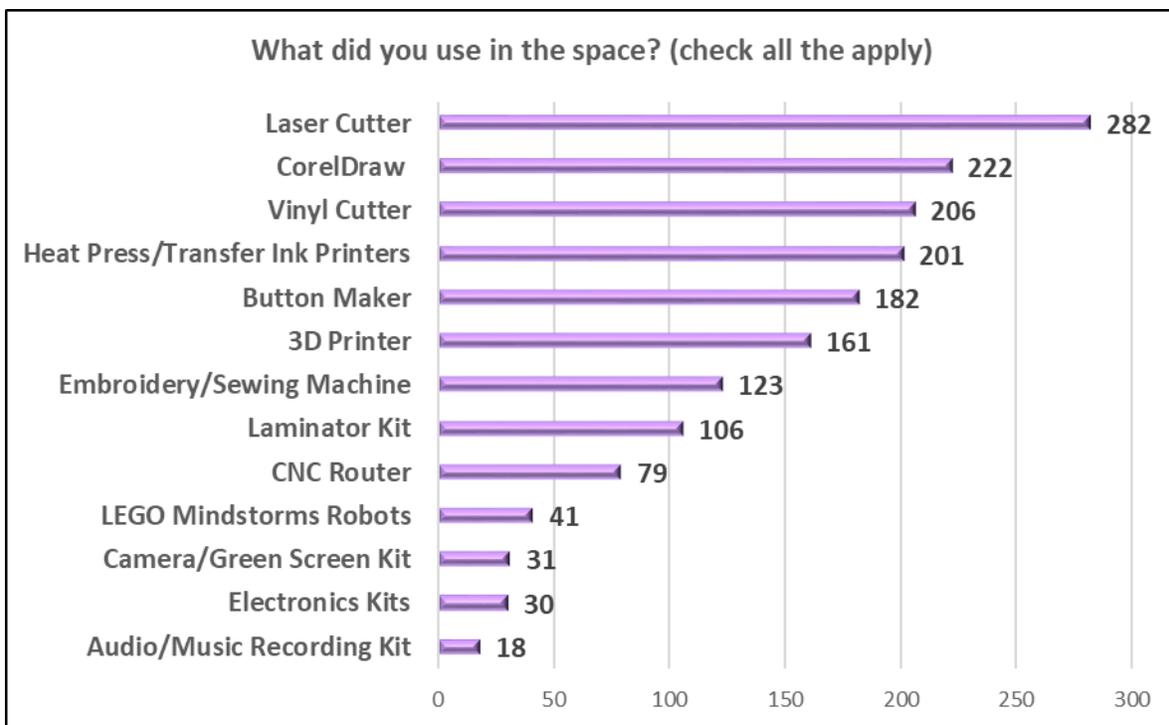
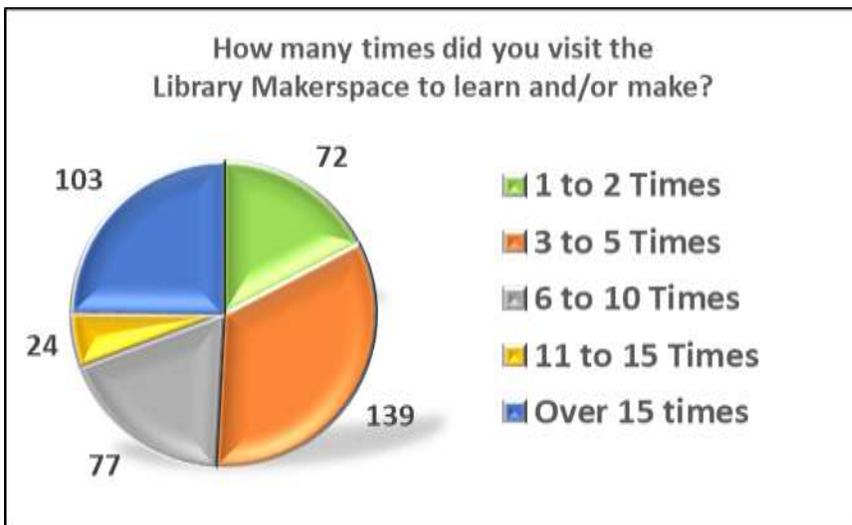
* Although there were 21 percent of the makers in the certification database 16 and younger, we did not send them surveys. Some makers under 16 may have completed the survey because their parent or older sibling received a survey at that same email address.



“Our library staff did an outstanding job promoting the makerspace, in addition to encouraging and teaching members of the community!”

“This was a great experience and our leadership team at the library did a fantastic job with communication, training, and trouble-shooting.”

“I never got the chance to experiment with some of the other equipment, but they are all such a benefit to this community. My church was able to save a ton of money with just the few items that I had the time to make, but we could do so much more if it was available permanently. I was sad to see it leave. But thank you for the opportunity that I was given!!”

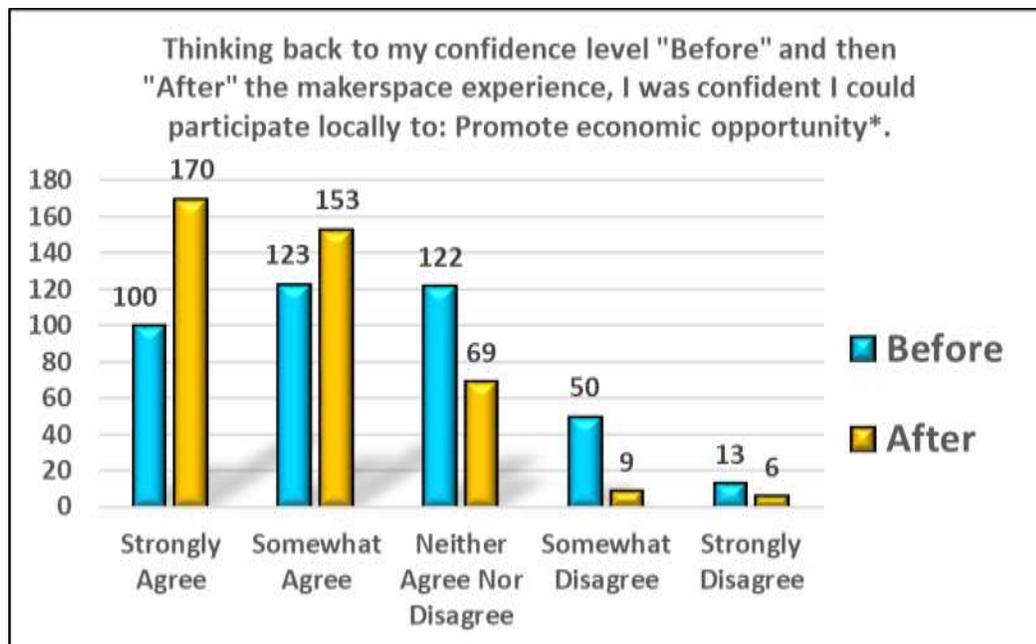
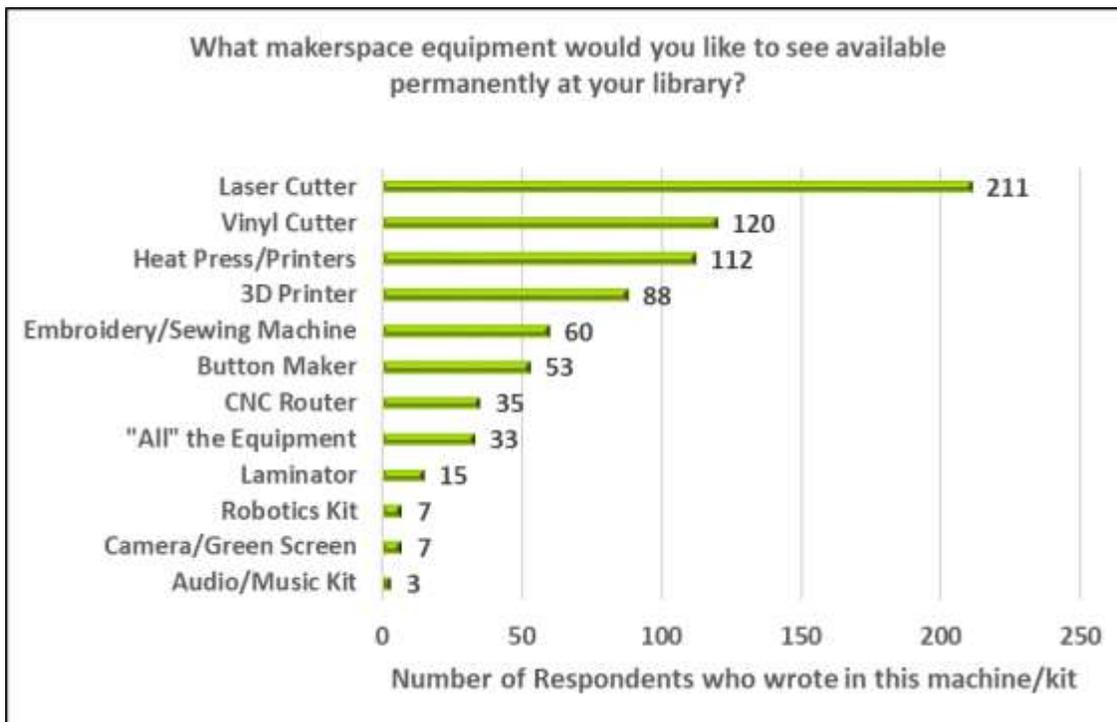


"I found this makerspace right as I found out about makerspaces from external media. This was during Covid, and I was very lonely and looking for a community of creators and the opportunity to make things. This makerspace was such a blessing that came at the perfect time. I grew so much from it, and I got to know the library and its employees much better. I started renting some items in addition to using the makerspace. Additionally, my partner deployed during some of the makerspace time, so I was relieved to be able to lean into this hobby and community to get me through a hard time. Thank you so much for doing this! It has truly made a huge impact on me and, I suspect, the rest of the Bellevue community."

"The school kids were able to make the following: a laser printed image, a 3d sculpture, buttons, an embroidered monogram, a heat pressed image, a vinyl sticker, and a laminated bookmark. They also used the Lego robot, the design programs, and a few other items. They had a blast in the 11 weeks we were a part of the program, and I was thankful to be part of the volunteer program. I know our community loved learning the equipment and having the opportunity to make new items."

“This is a great program and needs to be a permanent addition to all libraries.”

“Fantastic way to increase and promote patrons to use the library!!”



“Businesses were able to create marketing material that was handled out around the country. Small businesses benefited exponentially due to this equipment.”

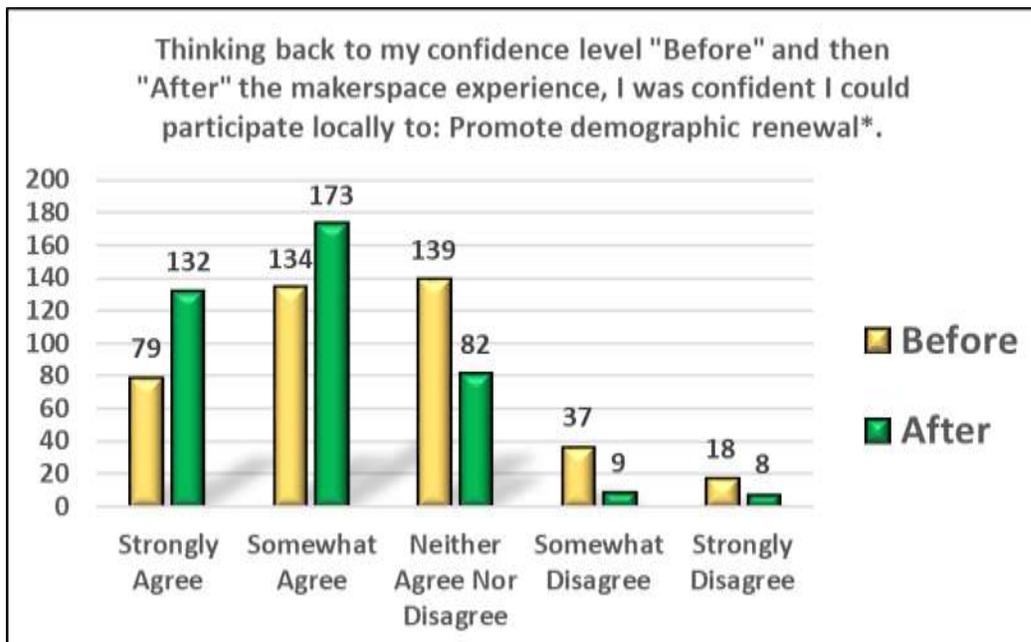
“People were creating items to advertise other businesses around town.”

* Examples provided to describe “Promote economic opportunity” were: supporting business development, encouraging entrepreneurship, creating a community foundation fund, and/or using makerspaces to encourage development of new products and business opportunities.

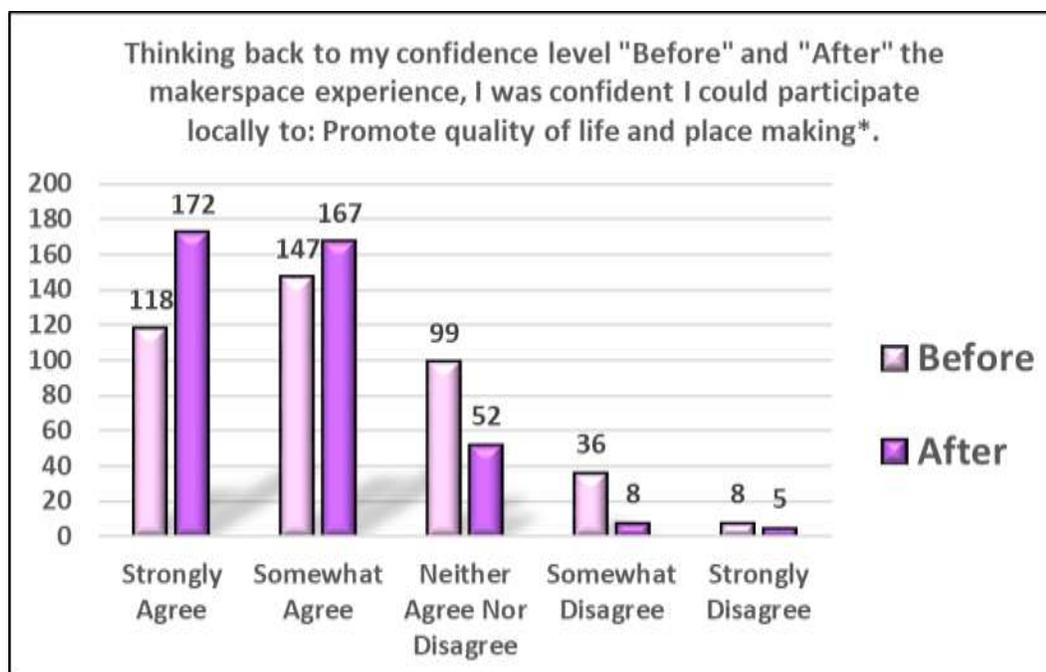
“I’ve always loved the library and its resources but this makerspace was truly amazing. I believe that a library is as important as a municipal police station or fire department. It is a vital portal for accessing data, information, and creative outlets for any community. I spent as much time as I could in the makerspace and it ignited a creative entrepreneurial spirit in me. A fantastic resource that enriched my life and sparked my imagination to design, produce, fabricate, and market the products I created.”

“An intern blossomed in her creative abilities to make things she never thought possible. This intern connected with the library and staff and made an enduring relationship.”

“Awesome experience! Can't wait to see what the library does next!”



* Examples provided to describe “Promote demographic renewal” were: recruiting people to the community, marketing the community to others and/or connecting with alumni.



* Examples provided to describe “Promote quality of life and place making” were: improving park and recreation services, increasing opportunities for social interactions through events, promoting art and cultural opportunities, encouraging 'main street' development, and/or promoting social interactions and activities at makerspaces.

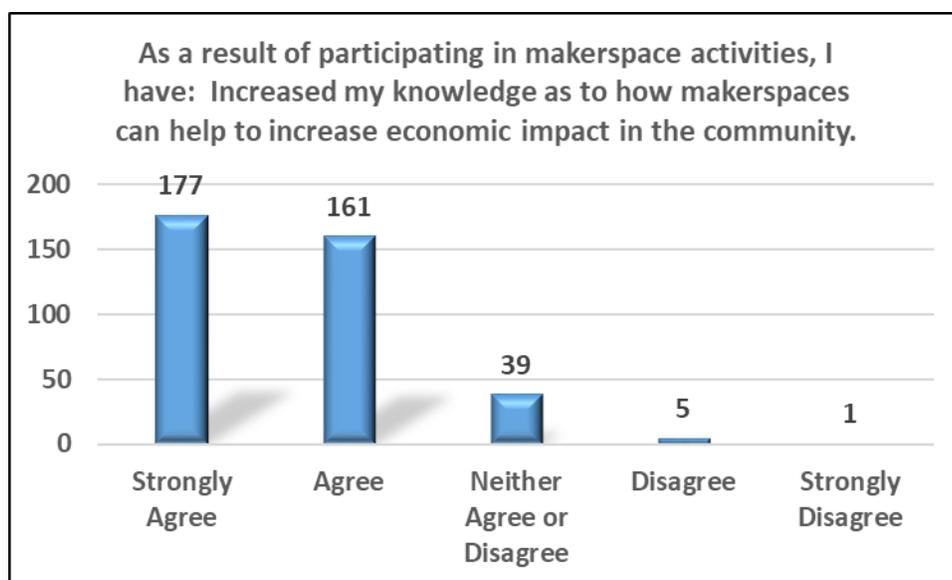
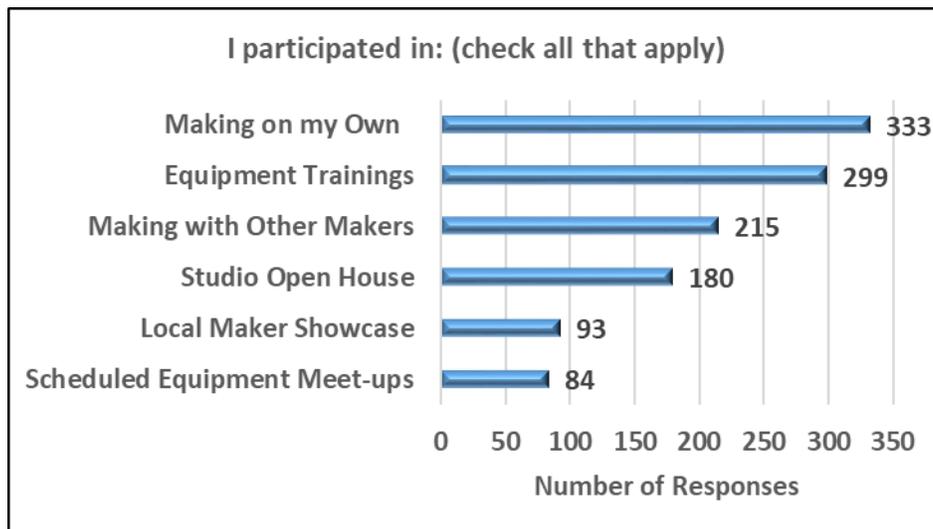
“I am patiently waiting for the pandemic to be over so I can get back to the makerspace. I also have two teenage daughters who are artists and love spending time in the makerspace. It is important to me they have a place to have fun that is safe and positive.”

“Great idea! I'm thrilled to have this in our community!”

“I was glad to see several small business owners create things for sale or to promote their business and at a great cost savings. Local teacher brought her class for button maker training and then sold the buttons to raise money to give the police to buy blankets or toys for children they came in contact with. I enjoyed getting to know several of the makers and the trainers better. Another teacher's aide, had many of her "life skills" students pick a personalized design which she would create for them to take to their residence.”

“Really hoping that a laser cutter is made accessible in the future (I know they're expensive). Loved getting to use it, so sad I missed the makers showcase at the end but glad to have participated in the makerspace!”

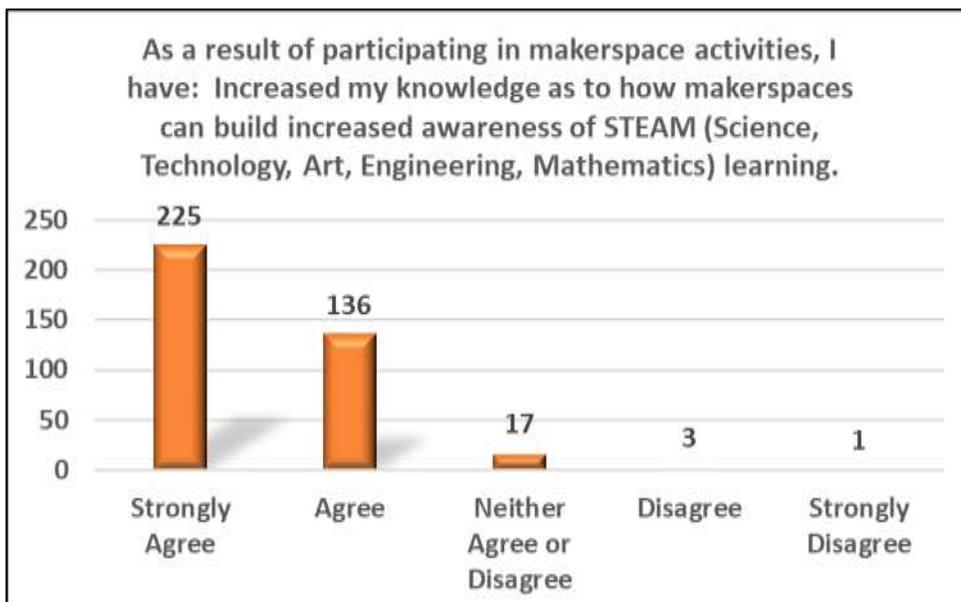
***“I love this program!
Thank You!”***

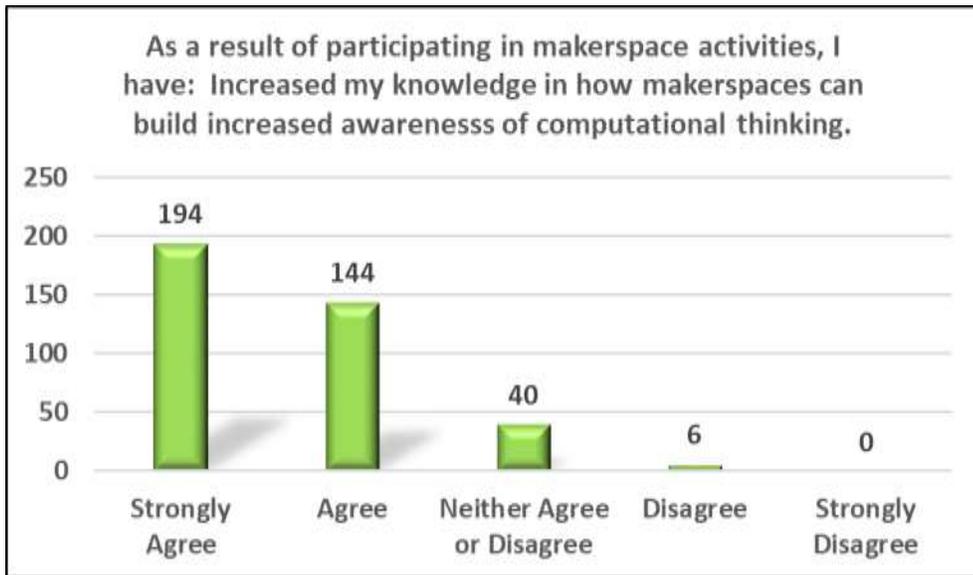


“This is a fantastic opportunity! I used the equipment for personal items, gifts, business use and more! It has expanded what my options are and I have used this for others as well.”

“I would have been trained on all and used all if the equipment would have been here longer. Once trained I brought my grandchildren to create projects.”

“The users that we had were very dedicated to learning how to use the equipment. I was thrilled to see a young woman who was very creative but said she struggled to bring her visions to fruition as she learned to use CorelDraw and the laser cutter. She designed a number of gifts for her family and was so excited about the machinery.”



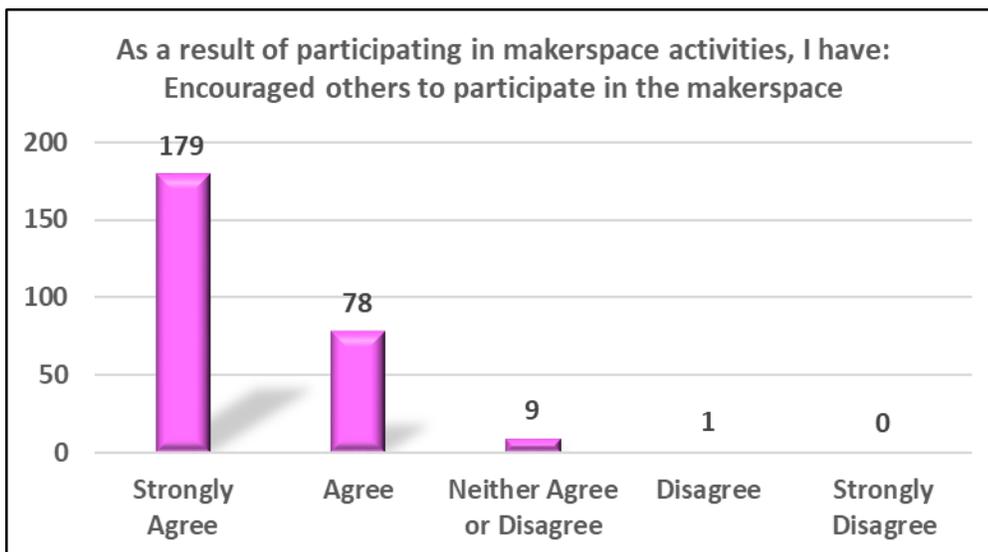
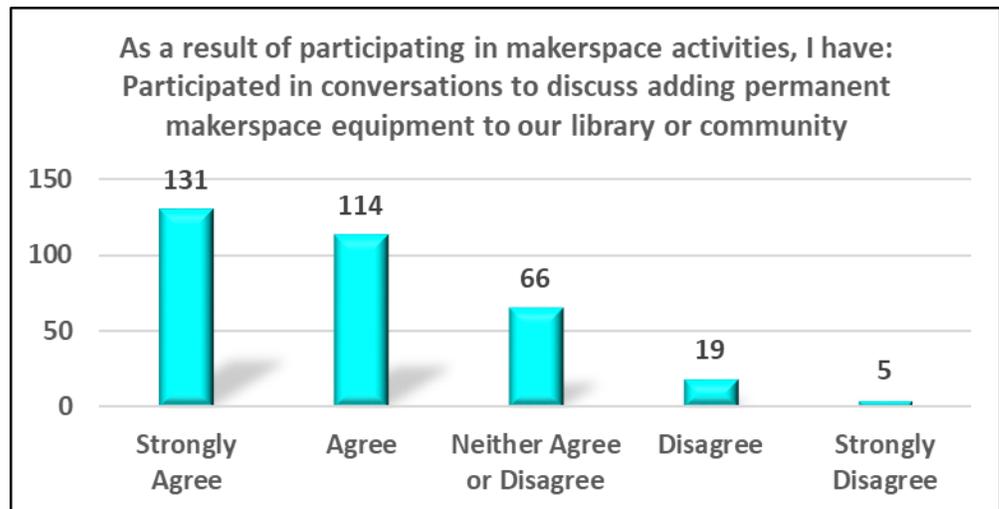


“I was glad a trainer showed us and gave tips. The machine was magnificent and gave me the skill to finally use my machine that is adequate but not as elaborate. Thankful for the chance to train and use.”

“I really liked this makerspace project. It gave me the opportunity to make things I never have before.”

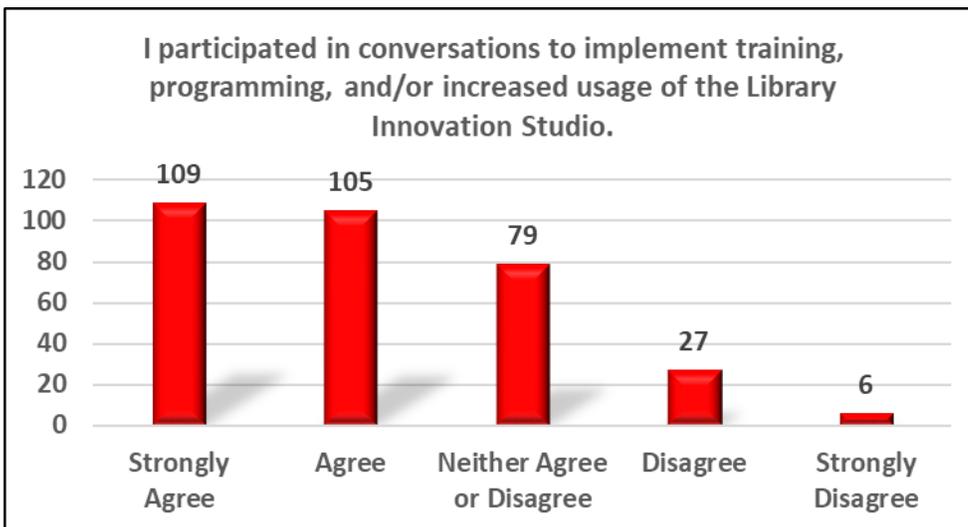
“It was great to have these machines in our community. Wish we could have them here ALL the time. Really learned a lot on how to use them and had lots of fun creating!!!”

“I loved it and hope it becomes a permanent part of the new library!! :)”



“As a teacher I was able to bring students over to library and it was a great experience. I kept coming up with ideas and the students would make it happen. I had a small class and it worked out well because the few students I had loved the technology and the ability to create. We are really missing the equipment now. We want to create.”

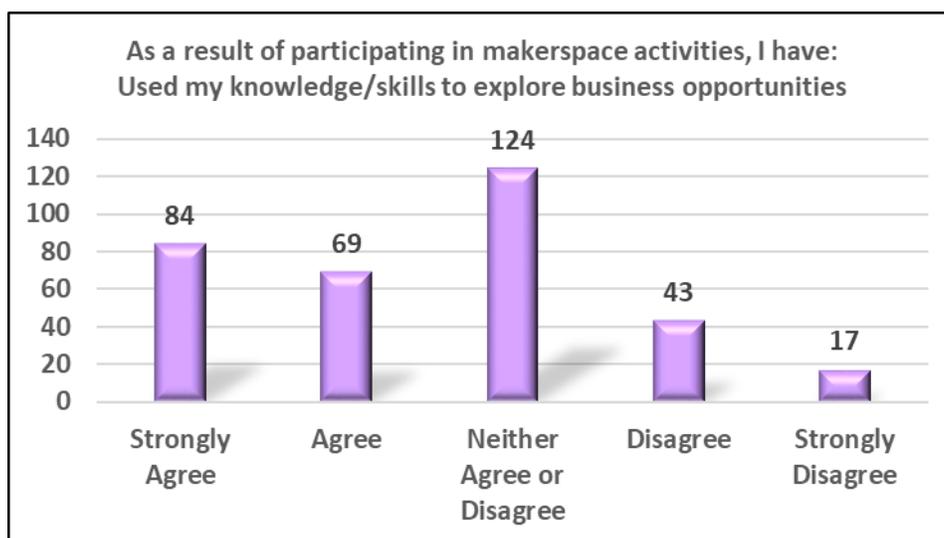
“The experience was wonderful! I tried to tell everyone I knew that these options were available at the library. I had not been to the new library but the makerspace caused me to get a library card and to check out other library materials. Very impressive project and thank you so much!”

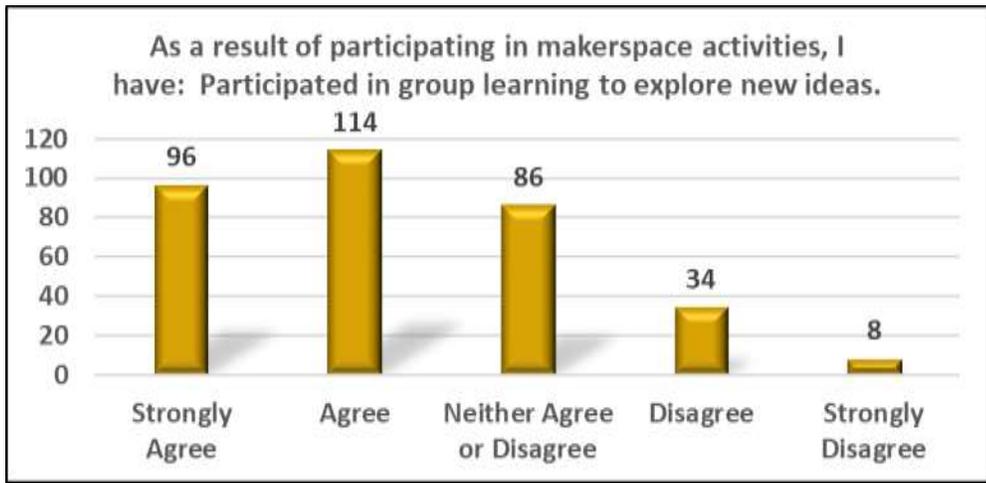


“Because we had the Makerspace over the holiday season, a lot of our patrons were able to make homemade gifts for family members. Some of the patrons expressed that it would save them so much money and it meant more because they made it themselves.”

“I am opening my own shop because of my experience.”

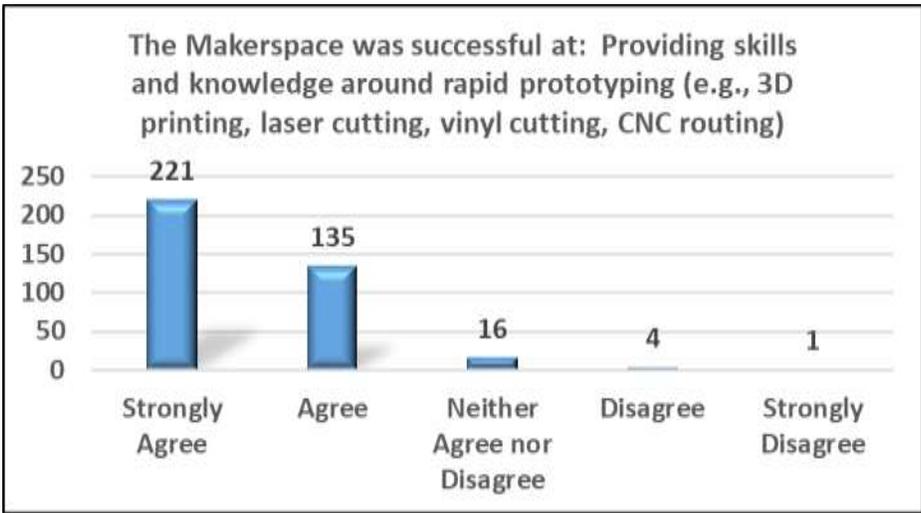
“A local artist created several pieces in the Innovation Studio and had them for sale at a local art fair. I was there and heard him talking about using the library to create his art.”



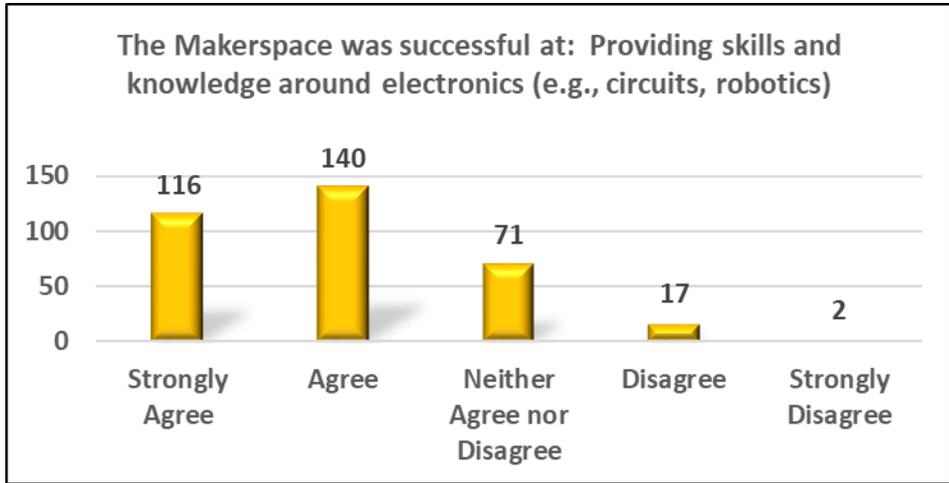


“My students and I were working through a financial literacy unit. In order to teach them about business, we started our own button shop. We designed buttons and sold them for \$1 to the student body (before and after school, and during lunch). The profits went to class chosen charities.”

“We created vector drawings for quilt pieces using Corel Draw and cut pieces from fabric using the Laser Cutter. Quilt pieces were curved and we cut 90 blocks in about 75 minutes. This would normally have taken hours. Also, less waste was created due to the fact that the laser could cut on a single line to create two quilt pieces. It was excellent!!”



“I made a doll house using the makerspace equipment!”



“Various new talents discovered, stigma of electronics was lessened by individuals not exposed to technical machines, and relationships established with library staff and trainers.”

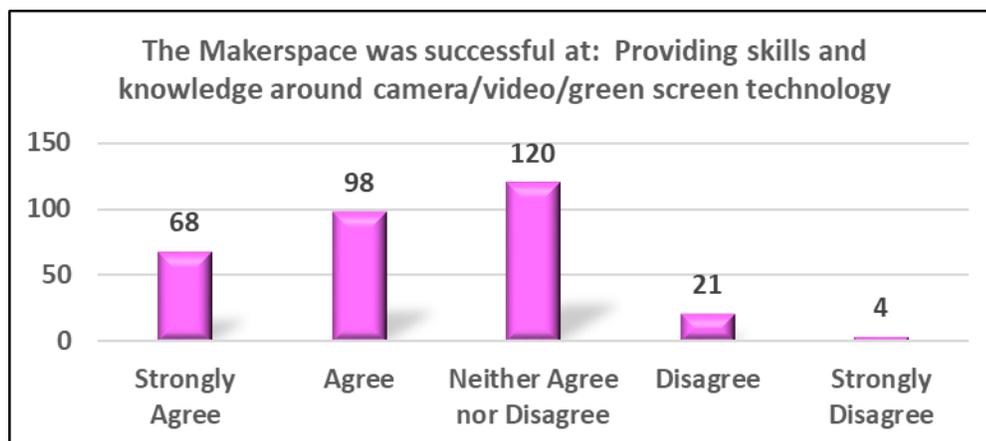
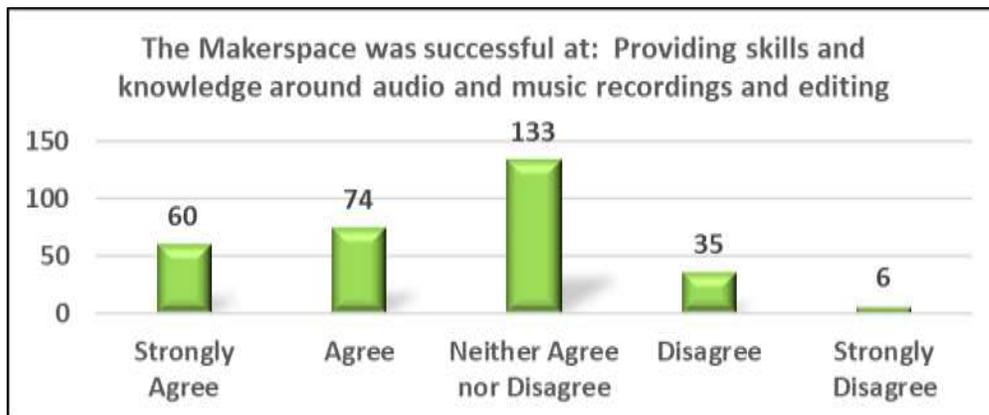
“I loved being able to bring my students over!”

“Thank you for doing this! It was a great way to try out equipment I have always wanted to try. I have so many new ideas and wish the equipment could have been at the library longer!”

“A high school shop class had a dozen or so students working on projects that employed the CNC router. Seeing teenage kids so excited about using the equipment was very rewarding.”

“This was an awesome experience. Thank you for the opportunity to learn about new technology.”

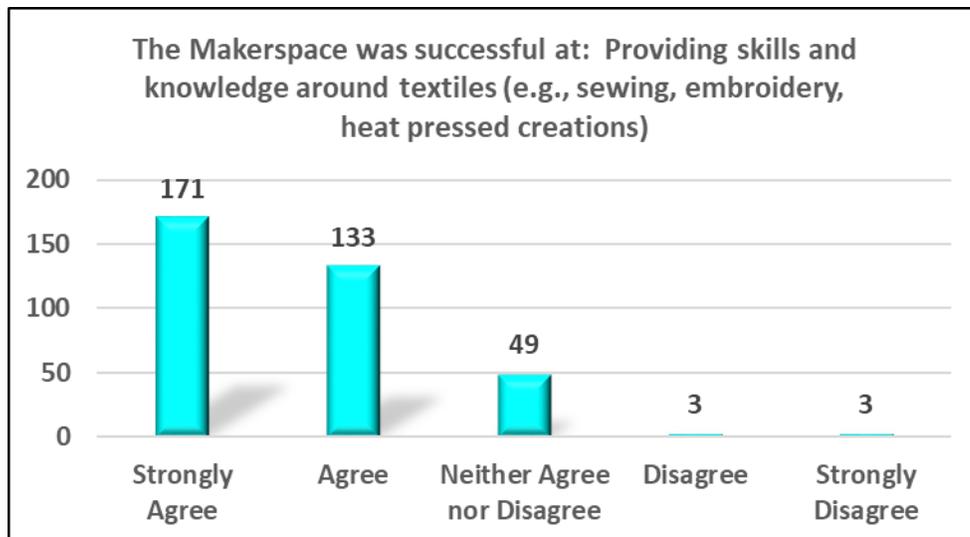
“I thoroughly enjoyed it and wish I would have started creating sooner.”



“Most of my experiences were with youth audiences. We had a variety of small groups for youth to experience the equipment: photography, coding-Scratch and Google, robotics, sewing, woodworking, STEM Day Camp, etc.”

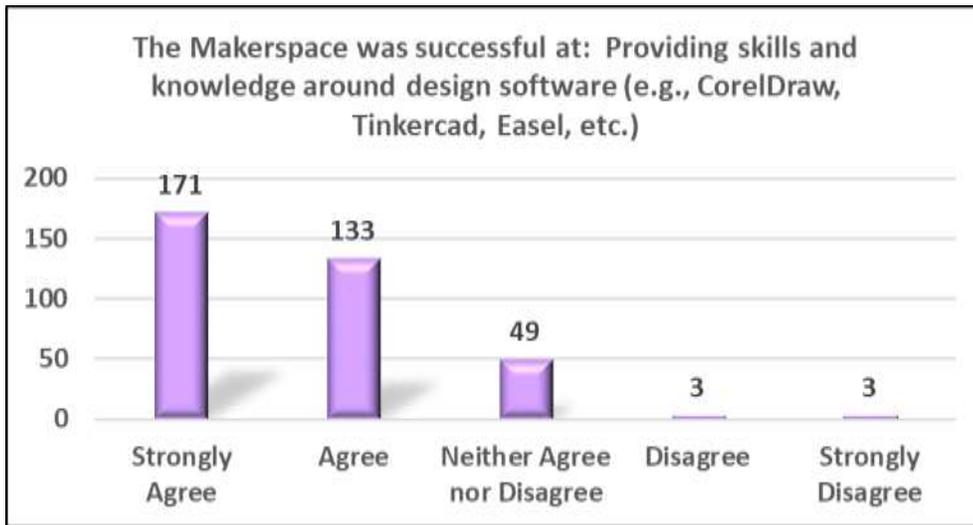
“I made all of my Christmas gifts! (Using the laser cutter, heat press, 3D printer, vinyl cutter, button maker.)”

“I would help raise money to purchase the most wanted machine especially if it was the embroidery machine.”



“I did much appreciate the Makerspace. My wife and I completed a project to create a unique gift for a family member. Without the Makerspace and the support provided by my local LaVista public library, we would have never been able to create such a wonderful item.”

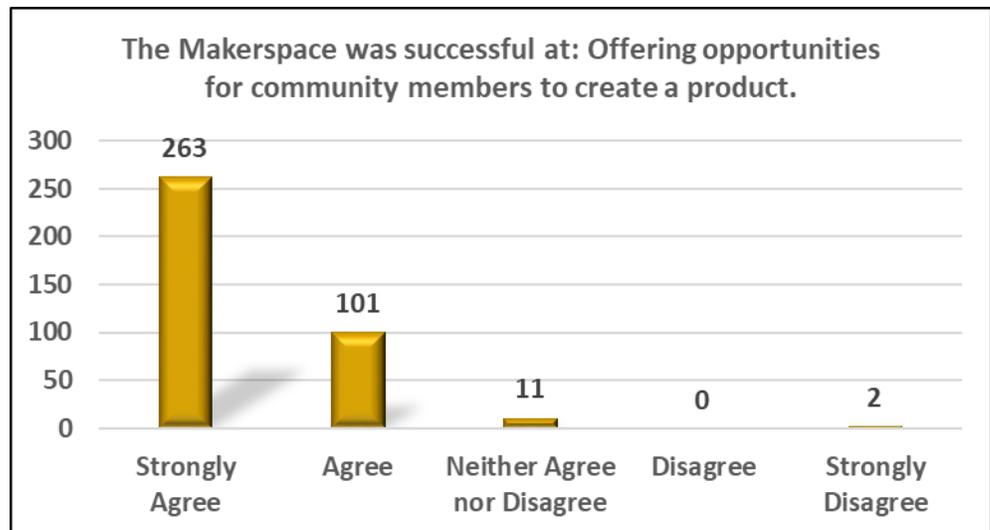
“We were part of the Library Innovation Studios and had the BEST experience. The community loved it. We are so grateful we were chosen to host!”



“I appreciate the opportunity to make projects that would otherwise be unavailable due to cost of equipment. The cost of materials were minimal and I love the projects I had time to do. CorelDraw still takes a LOT of time to figure out and prevented me from doing all of the projects I had in mind, but I'm grateful the library now has their own laser cutter so I can still get them done!”

“I made lots of things - family recipes engraved on cutting boards, family trees, home decorating signs, shirts, games, keychains, garden flags, storage items and many, many other items.”

“It is a wonderful program to expose both adults and students to new technology. Thank you.”

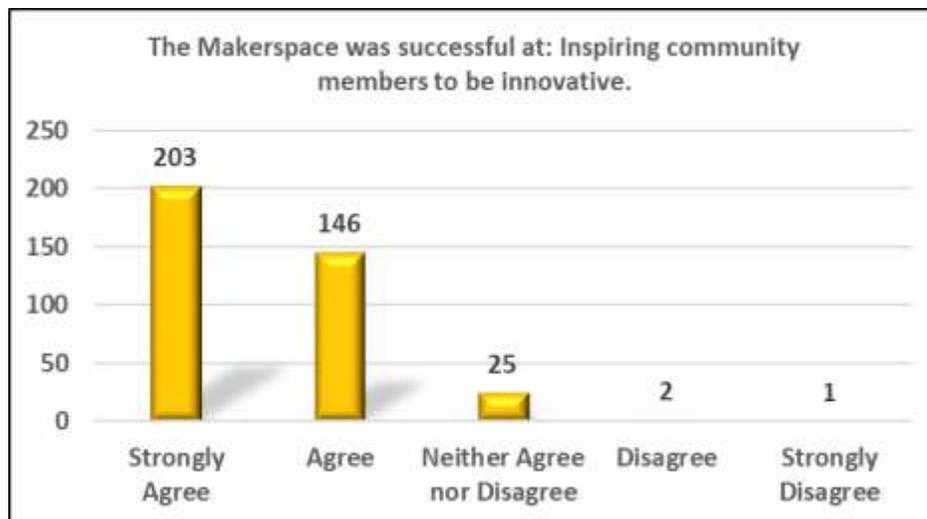
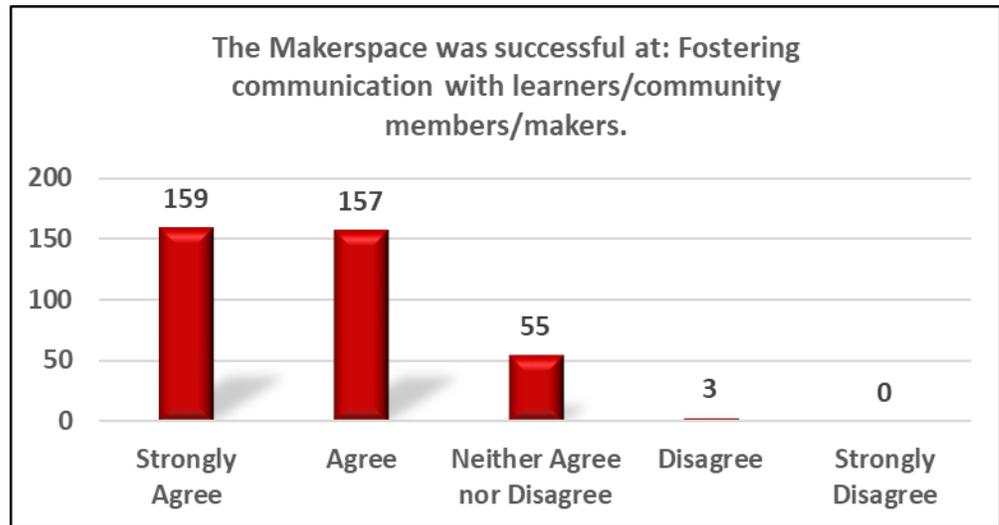


“I made a variety of laser cut items for me and my family and also to sell. I used the vinyl cutter to make items to sell. I used the button maker for personal items and also to make giveaways for the Tour de Nebraska that came through Kimball in June. And I also used the heat press to make items for myself.”

“I have a small design business. I etched several mugs and cut yards of vinyl for my customers. I also trained others on the heat press as I own one myself.”

“I met other small business people and library staff who are very creative and energetic. Really enjoyed the experience!”

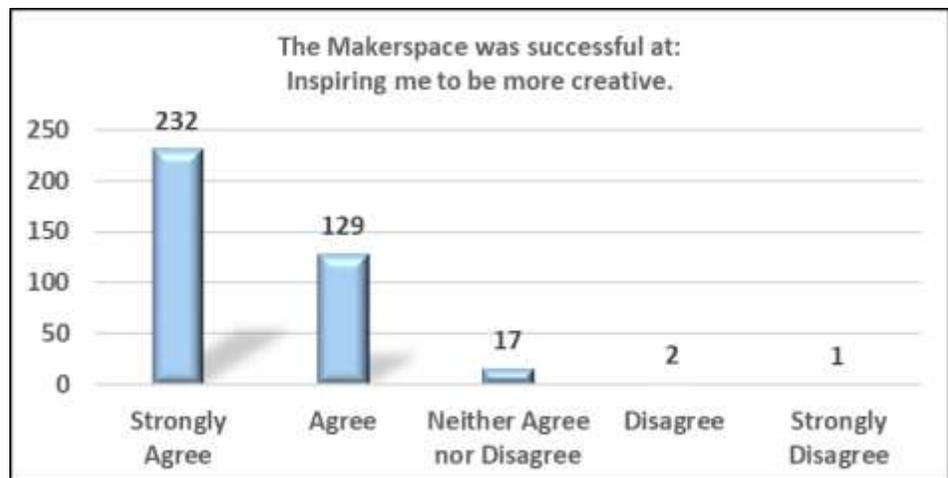
“I'm thankful to a part of the learning experience and the volunteer program to help with the after school program.”



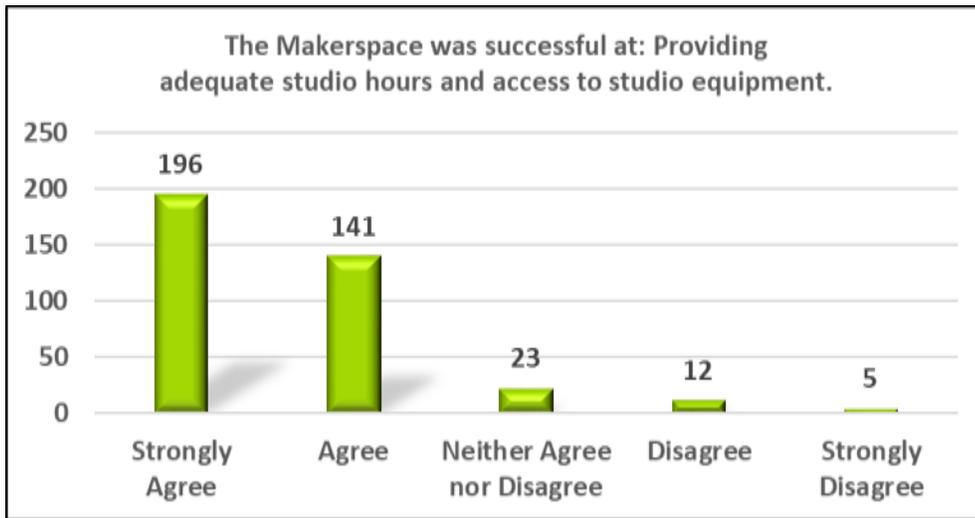
“I really enjoyed having the maker space equipment here in Scottsbluff. I never really knew about these different types of equipment, the items you could make personally, or that things like that were available. I believe that you have showed us only the tip of the iceberg and I would love the opportunity to discover more!!”

“Absolutely wonderful to have this equipment available for public use!!!! What a great way to enhance people’s creativity!”

“It's a great place to explore your creative side and business side.”



“Libraries involved with the Library Innovation Studios project started their own makerspaces with amazing speed. Their experience with the project helped them to hit the ground running and know what equipment their communities wanted to use long term.” Emailed response from Max Wheeler, Nebraska Innovation Studio (state-wide partner)

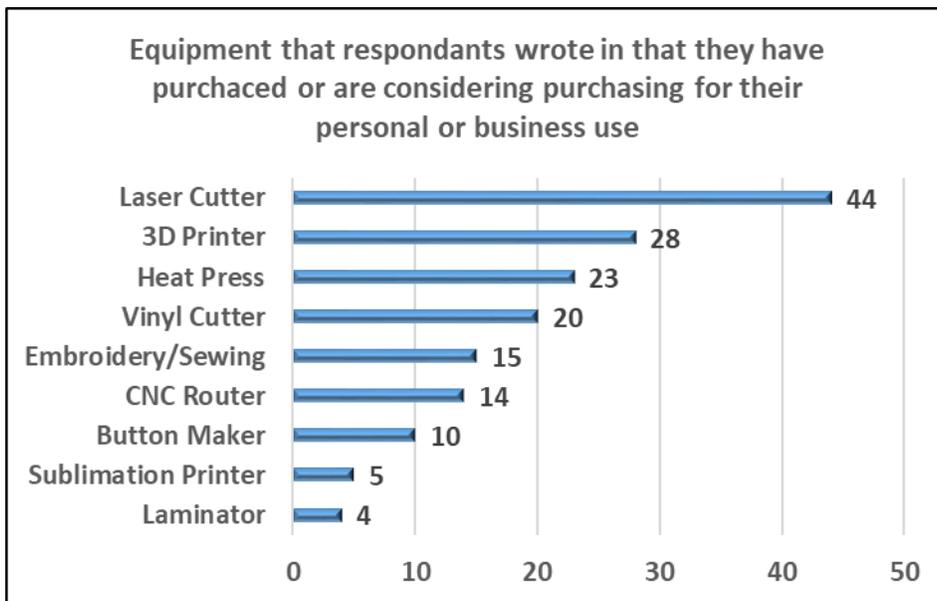
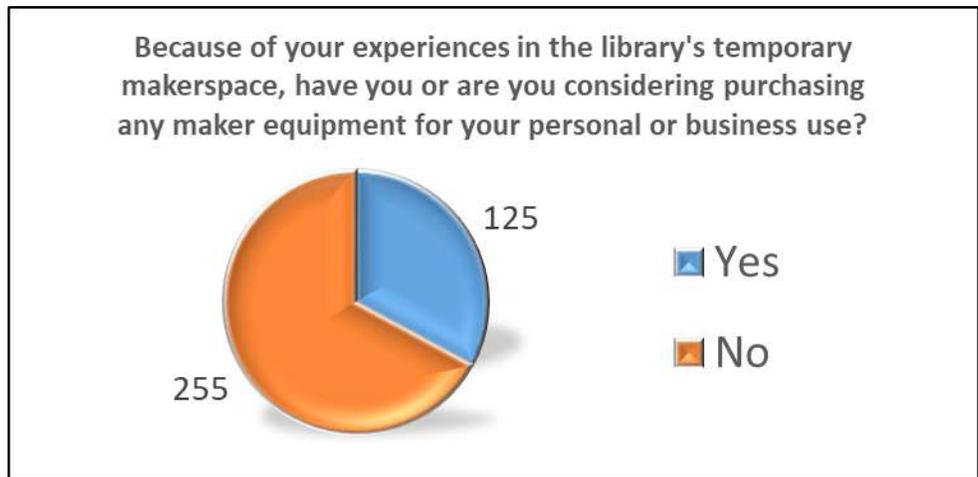


“It was tricky getting time to use the equipment because everyone loved it so much! It was also not exactly user friendly with the CorelDraw program, but after MUCH help from the library staff I was able to accomplish my goals.”

“I purchased a Snapmaker 3D printer, a laser engraver, and a CNC machine.”

“I have looked into purchasing the 3D printer, laser, CNC, and a heat press.”

“I have purchased a laser cutter and heat press.”



“Our family ended up buying our own 3D printer—we were inspired by the one at the library to just get one.”

“I have already purchased a 3D printer and heat press. I will be purchasing a printer dedicated to sublimation printing in the future, and I was given a CNC milling machine.”

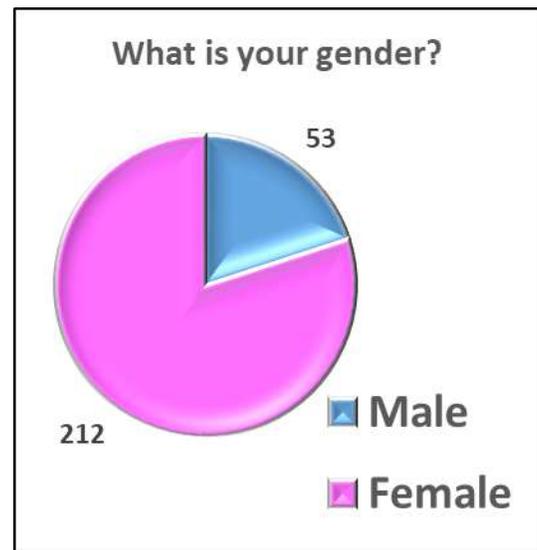
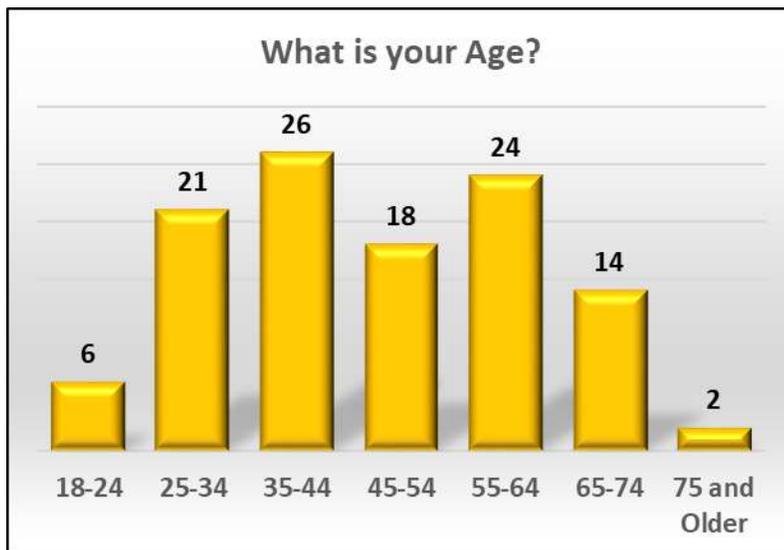
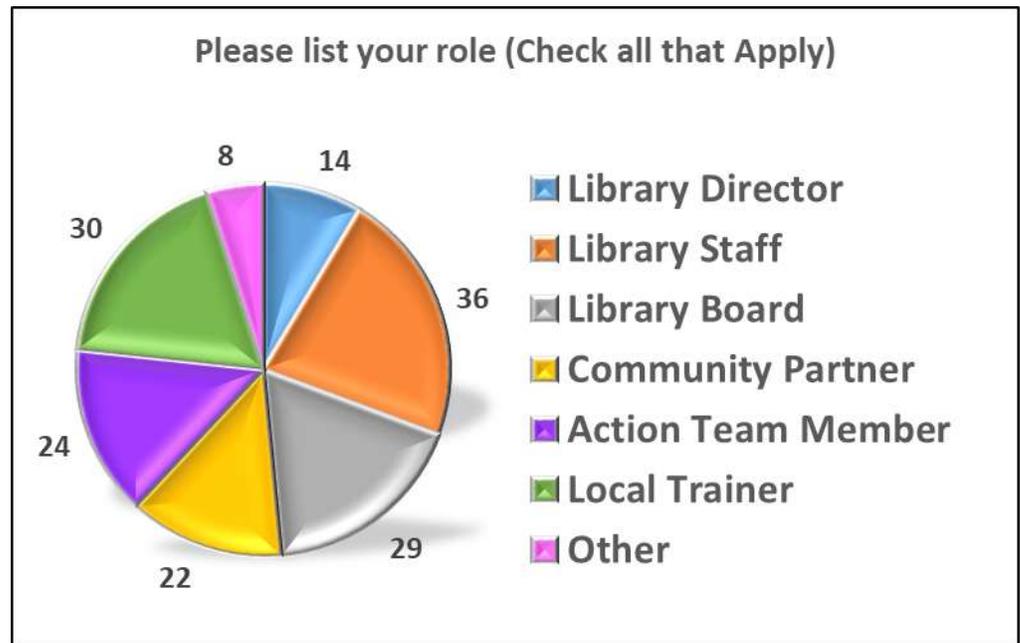
“We purchased a 3D printer.”

Section Four: Surveys Conducted with Community Team Members

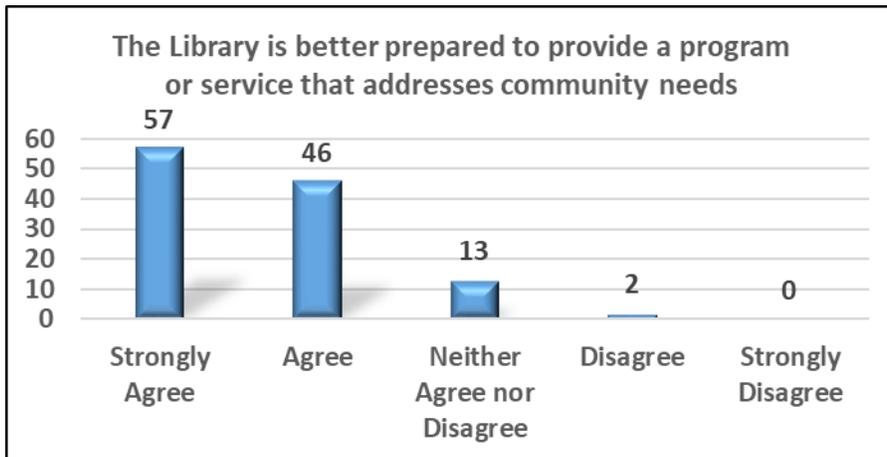
Host libraries were asked to establish a community action team to engage local organizations to gain support for the program, find volunteers and staff to coordinate local logistics, and participate in community engagement activities before, during, and after the hosting period. Community teams often consisted of library staff, community members, library board members, and the local extension educator. The team may have also included a library intern, generally a high school student. The local team members were surveyed, and this section of the report covers the results of those surveys.

"We had SO many people in and out of the library utilizing the makerspace. I had made a large quantity of different projects with different machines."

"Between personal use and programming, I was always down at the library making, training, or teaching."



"First thing, Great job on the 2021 Nebraska Makerspace Conference! Every session that I went to I learned something new or received good advice on what or what not to do in a makerspace. I really enjoyed that there were smaller libraries represented." (Emailed note after the November conference)

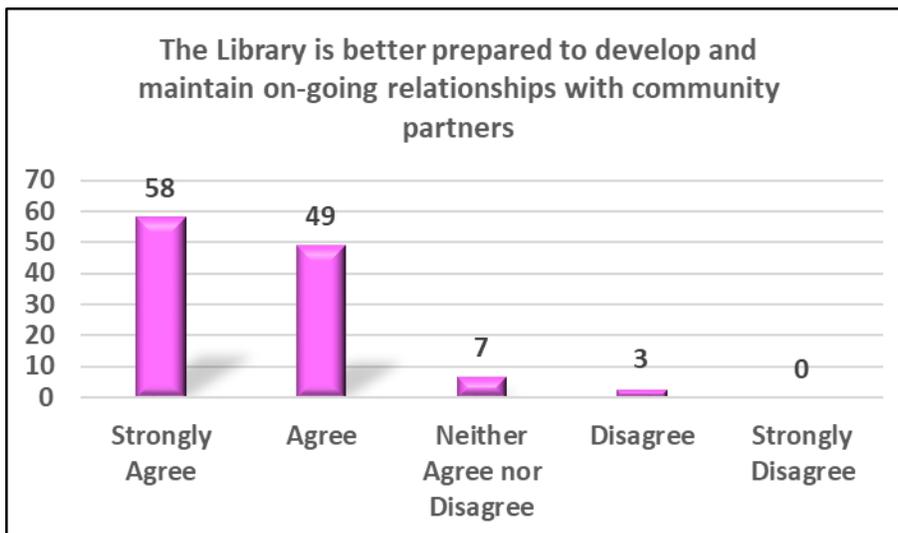
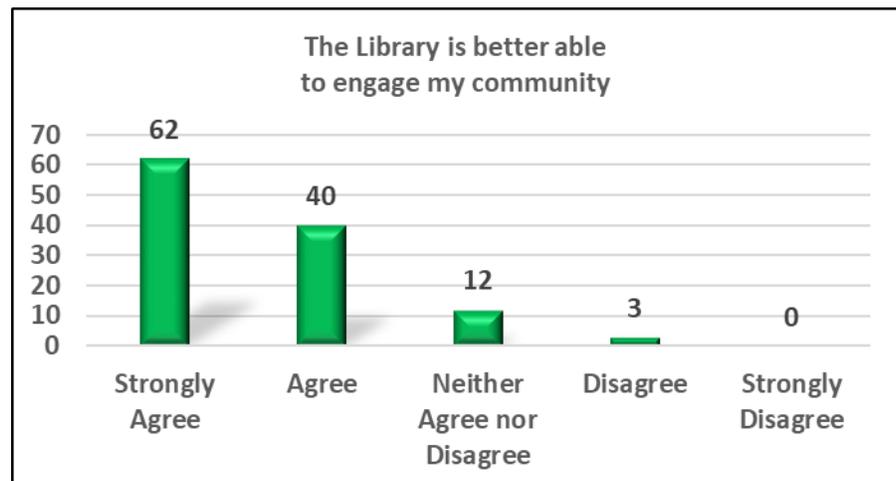


“The library was able to solve the Village's headache over misuse of the recycling center with pictorial vinyl signs that really helped the public.”

“Training was easy, fun, and informative. I love sharing information on the maker space to the public. Having the opportunity to learn and utilize the equipment makes me excited to be a part of the community.”

“Cool, innovative way to engage community members and make a positive difference in the community.”

“Staff members were able to work as a new kind of team to excite and engage the public. The pride they took in the studio was heartwarming.”



“Joining with our 4H Extension Service in partnership and still having them work closely with our Maker Hub is to me one of the biggest success stories.”

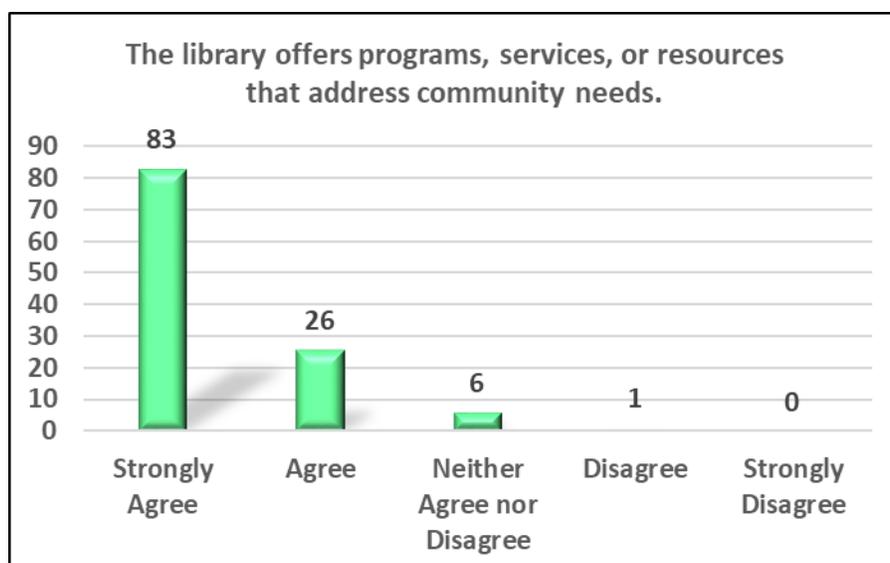
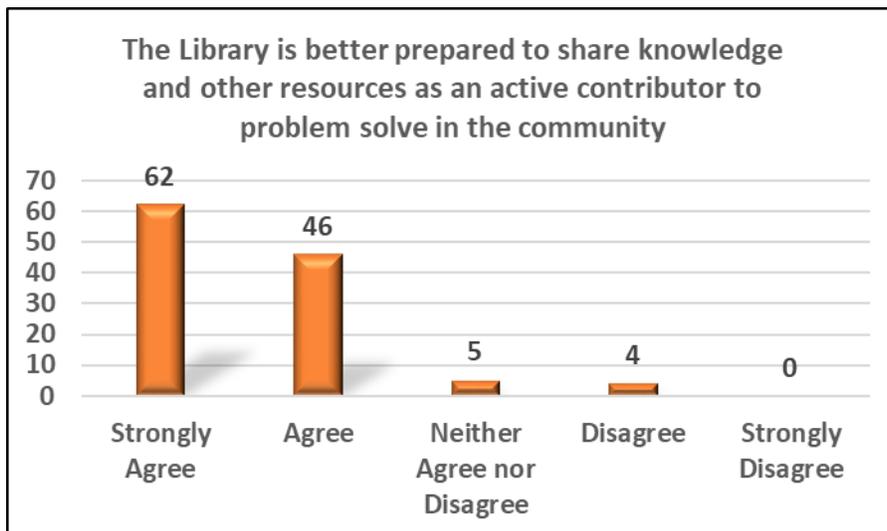
“Our partnership with 4-H was successful, and we ran several successful programs of our own, including an adult Pinterest club.”

“These were all interesting projects that brought together children, parents, school and club groups—hours of enjoyment.”

“This was such a valuable experience for our small community. I had opportunities that I never dreamed that I would experience. I absolutely loved having these machines at the library. Thank you SO much for bringing this to our library.”

“I enjoyed watching the students creating projects and determining the steps involved to make it happen. I would come up with an idea and they would troubleshoot until they figured it out.”

“I think it introduced more people to what the local library offers. Built up community spirit in a positive way.”

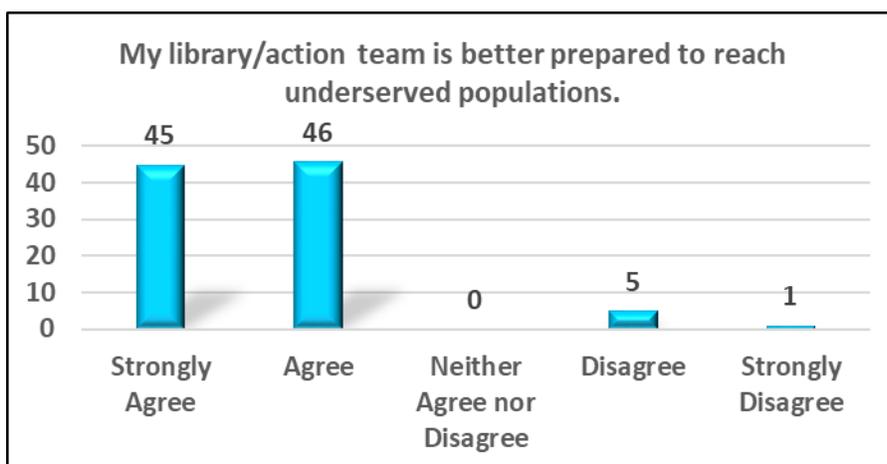


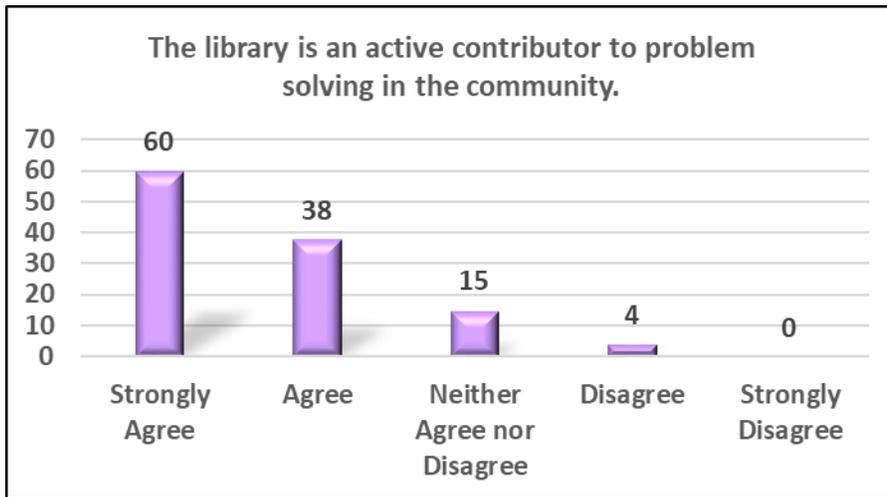
“During December, the library used the heat press to make free Christmas ornaments, engaging multi-generation families and our young patrons from low-income families.”

“Thank you very much for providing us with this great opportunity. The staff was great. If one member didn't know how to use a machine to its full potential, they would find someone who could.”

“I think it was a good opportunity for the community to be able to access equipment that would not have been an option otherwise.”

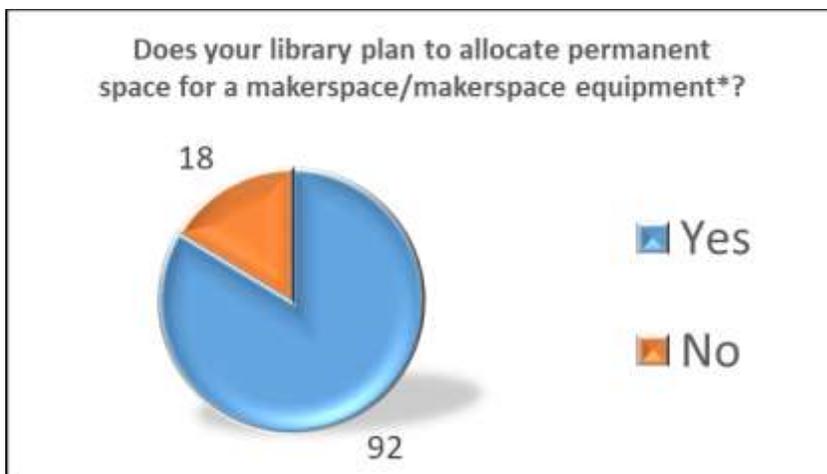
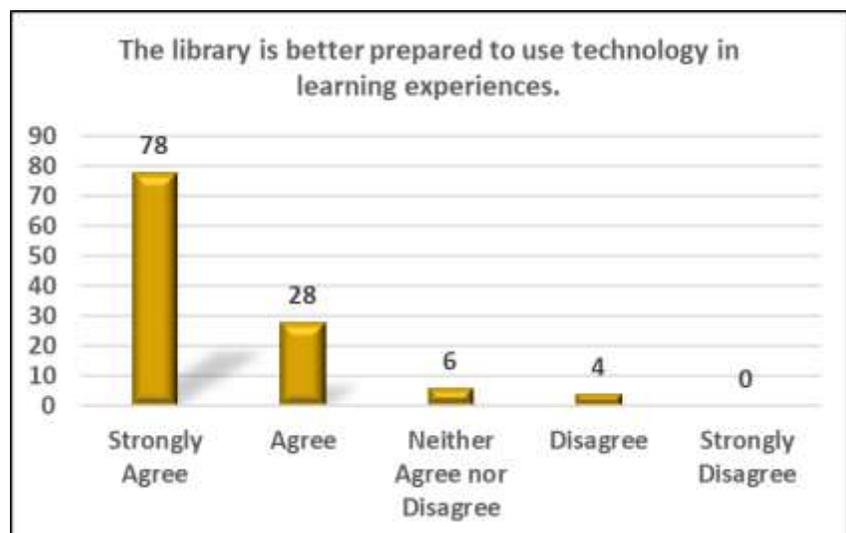
“The high school intern was a great way to increase awareness about the library to populations that may otherwise may not have been as likely to utilize the library.”





“We had a gentleman come in and learn how to use the 3D printer because he was out of work due to a shoulder surgery. He started printing parts to build a life-size robot bust...and he has fallen in love with the project so much that he is still coming in and printing off pieces, learning about electronic kits to make the robot move. He is also talking with other makers online learning about how to best assemble it.”

“This is one of the most amazing projects I've ever been associated with. It unlocked creativity in me that I didn't know existed. I made gifts for family and friends that they will cherish for many years. I made items for students and fellow colleagues. I brought students to experience the makerspace and see how technology can be used to create things. I just wish we could have had the machines longer!”



“The people who really used the equipment were extremely creative. One of our volunteer trainers became expert on the laser cutter and made some terrific projects! The vinyl cutter was also used quite a bit and one person made a bunch of inspirational quotes for her classroom and school. Everyone who participated took full advantage of the opportunity the makerspace studios provided.”

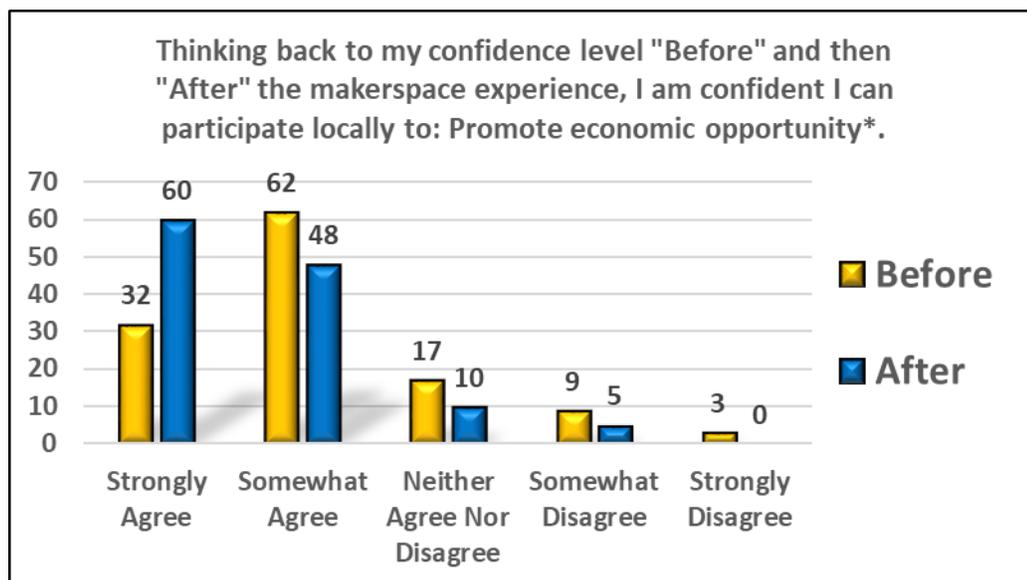
“I like the opportunity to try new things that I cannot afford to purchase.”

* This survey was taken soon after the hosting period for each library so it was hard to know if the answer would change in time. Because some libraries had more team responses than others, using these numbers to calculate the percentage of libraries that initially thought they would move ahead may not provide an accurate number. By the end of the project, 91 percent of the libraries established makerspaces with 4 to 23 pieces of equipment each.

“I watched my grandson go from printing pre-designed small items on the 3D printer to designing simple shapes to multiple adjoining shapes. I remember his excitement the first time he put a cone through a box while designing and the tip of the cone came out the other end. The "lightbulb" came on. From then on he was smitten. Now he can even design using the hinges and uses the printer to make items for use at his home. Building a child's self esteem is one of the greatest things I think one can do. And as a grandparent I knew I could play a role in this. The makerspace would make it so easy for even non-creative grandparents to help their grandchild grow in self esteem just by bringing them and creating things with them. Children are so receptive to being creative, this is a great avenue to help them believe in the I CAN idea.”

Popularity of Equipment from the Perspective of Local Teams (with most popular listed first)

- Laser Cutter
- 3D Printer
- Vinyl Cutter
- Heat Press/Transfer Ink Printers
- Button Maker
- Embroidery/Sewing Machine
- CNC Router
- LEGO Mindstorms (Programmable Robot
- Electronic Kits (Sparkfun, Arduino)
- Laminator Kit (w/Tracing Pad & Label Maker
- Camera/Green Screen Kit
- Audio/Music Recording Kit



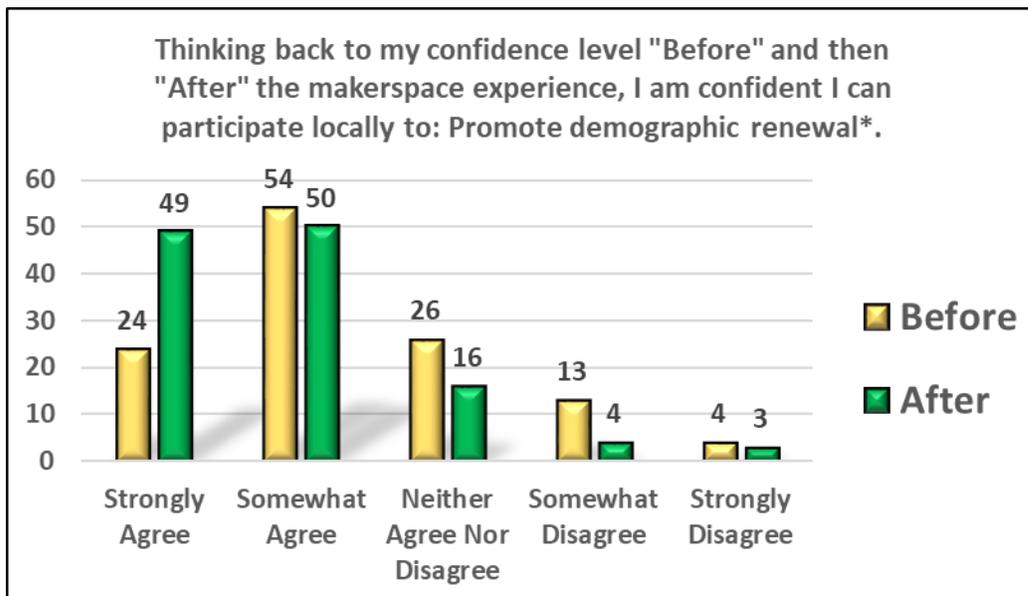
“I really loved coming there and using these machines. I wish you had them all the time. I didn't have enough time to try the rest of them. Thank you for the opportunity!”

“I wish I would have had more time using the equipment. I have more project ideas!”

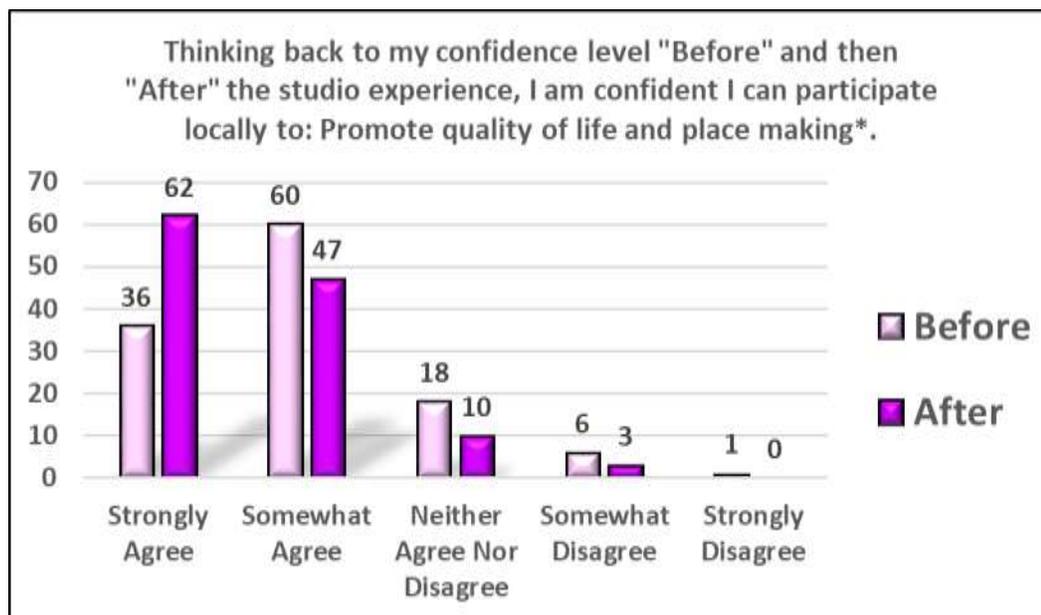
* Examples provided to describe “Promote economic opportunity” were: supporting business development, encouraging entrepreneurship, creating a community foundation fund, and/or using makerspaces to encourage development of new products and business opportunities.

“I made a variety of items from 3D printed Voronoi skulls to laser engraved images on wood and aluminum. Many of the products I made sold faster than I could create them at arts and crafts show and to private patrons. I also cut vinyl graphics and printed t-shirts my 6-year-old grandson designed on the ink printer/heat press. I created custom plaques with the CNC which I custom painted and embellished with resin inlays. It was an amazing experience to have access to all the equipment in Norfolk. I encouraged everyone I knew to visit the space and get creative with the equipment. A truly remarkable and forward-thinking space for creative types and those who would like to learn more skills but would not normally have access to such equipment.”

“It was a great experience. I think that we could have done more community building and outreach while it was here, but it greatly increased my confidence in participating in technology and maker opportunities and that I can learn to use and to teach others how to use technology.”



* Examples provided to describe “Promote demographic renewal” were: recruiting people to the community, marketing the community to others and/or connecting with alumni.



* Examples provided to describe “Promote quality of life and place making” were: improving park and recreation services, increasing opportunities for social interactions through events, promoting art and cultural opportunities, encouraging 'main street' development, and/or promoting social interactions and activities at makerspaces.

“It was awesome equipment and such a lovely opportunity for our community!”

“I feel that it provided a great service to the community and it has been very rewarding as a trainer and librarian to have participated in this project.”

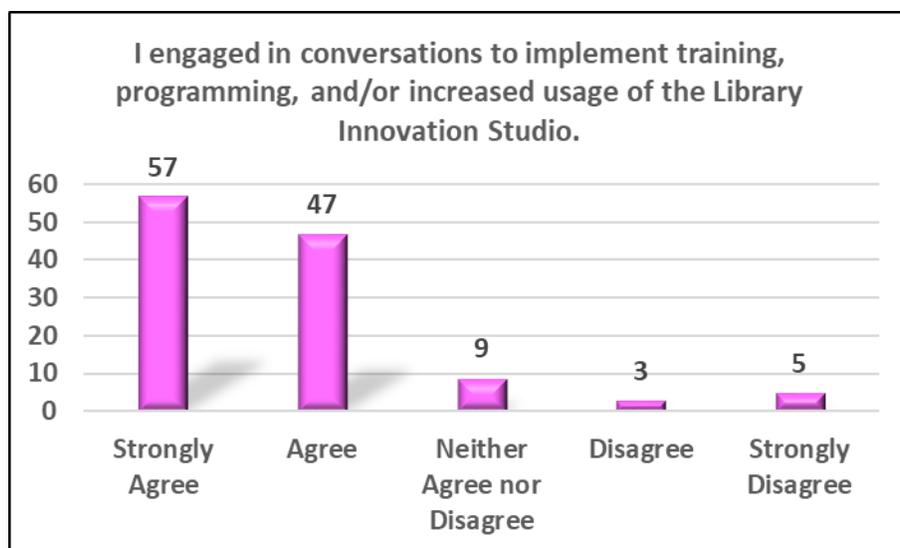
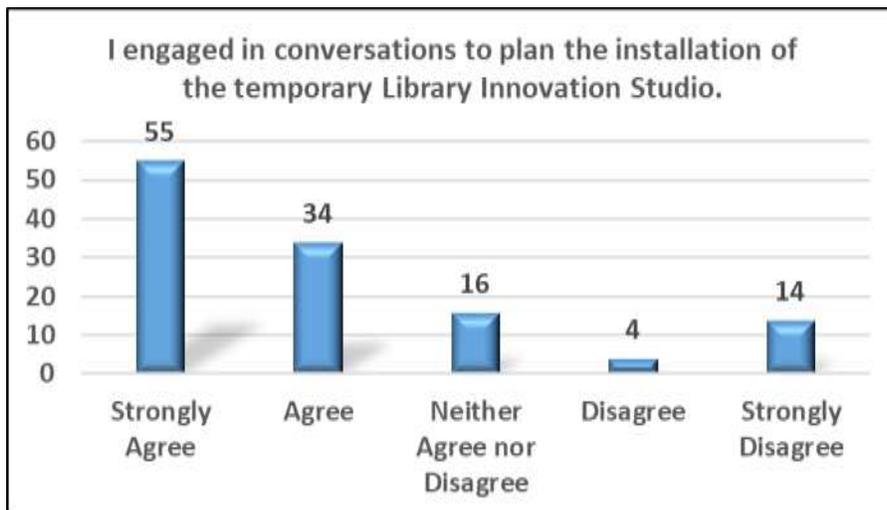
“Great experience for community, our librarian did a great job.”

“The students that came to the studio were in awe of what they could make themselves. Some teens even made t-shirts with heat pressed designs they sold to their friends. Makers who had a small business came in to make t-shirts.”

“People were so impressed with the capabilities of the equipment. It was so neat to see their excitement when their project was finished. One teacher put up a vinyl saying on the wall of a local school. The other teachers loved it and she ended up doing a vinyl quote for every classroom.”

“We already had a makerspace before we hosted the makerspace but it helped our staff learn how to better manage the training/certification process. We were just winging it before then.”

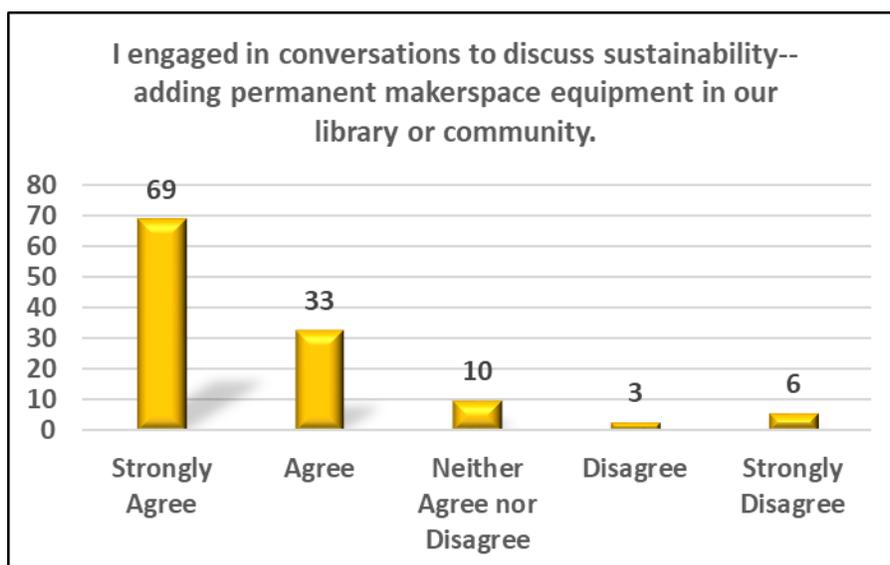
“My only critique is that the time spent training Library staff and other trainers was too short. This should have taken more than two days to allow all staff an opportunity to learn, and then practice what they learned with supervision.”

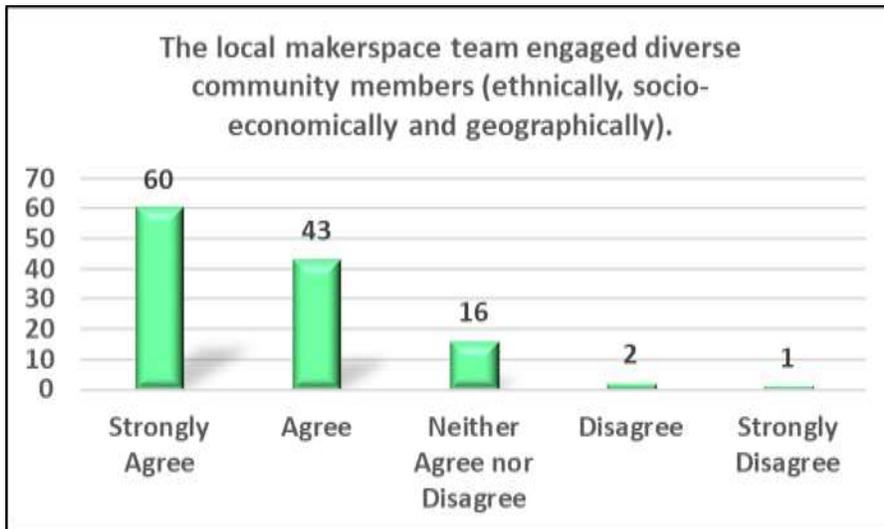


“I’m at the library every week, and sometimes several times a week. While the innovation studio was in place, I was there about 16 hours a week, and probably met most everyone that came in. There were a lot of new faces, people I’d never seen in the library (or even the town) before. Most of the projects took the form of gift personalization. The biggest projects were special event T-shirts using either the printers or the vinyl cutter. “

“Rather than have individuals purchase all of these different types of equipment, for issues related to sustainability, I like the idea of makerspaces so people can be innovative and creative without a huge personal investment.”

“It was a wonderful project and we’re fortunate to have had the opportunity to host it and use all the new equipment I never would have had the opportunity to use otherwise.”





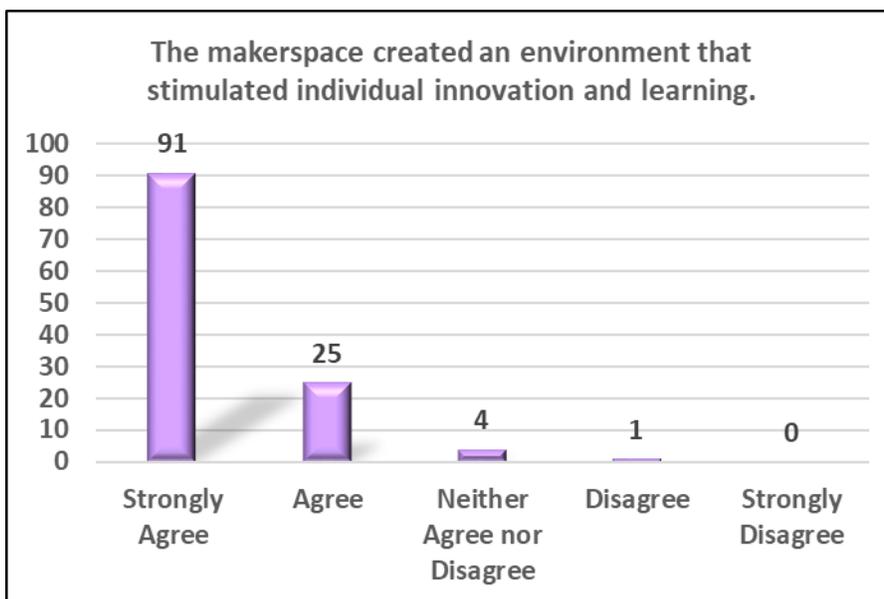
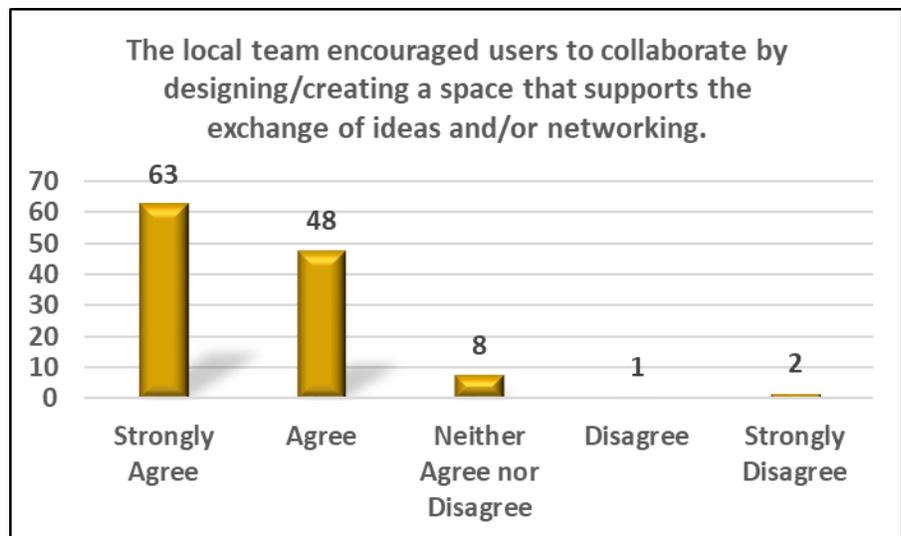
"A Native American patron used the heat press to preserve a photo of her late husband onto a beaded necklace that is part of her traditional dance costume."

"An intellectually-challenged patron was able to use the button maker to make meaningful photo presents for her parents."

"It was an amazing opportunity for our library. Thank you."

"It was a great program and the staff were wonderful. I learned so much!"

"Our 4-H club made stall card signs using the vinyl cutter. We provided metal signs and each youth were able to create a sign with an image of the animal they were exhibiting along with the 4-H emblem, their name, and our club's name."

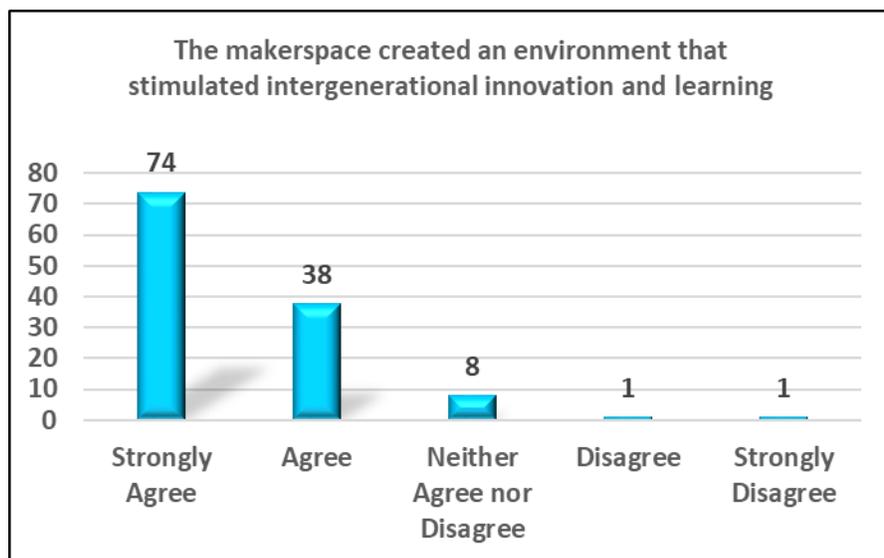
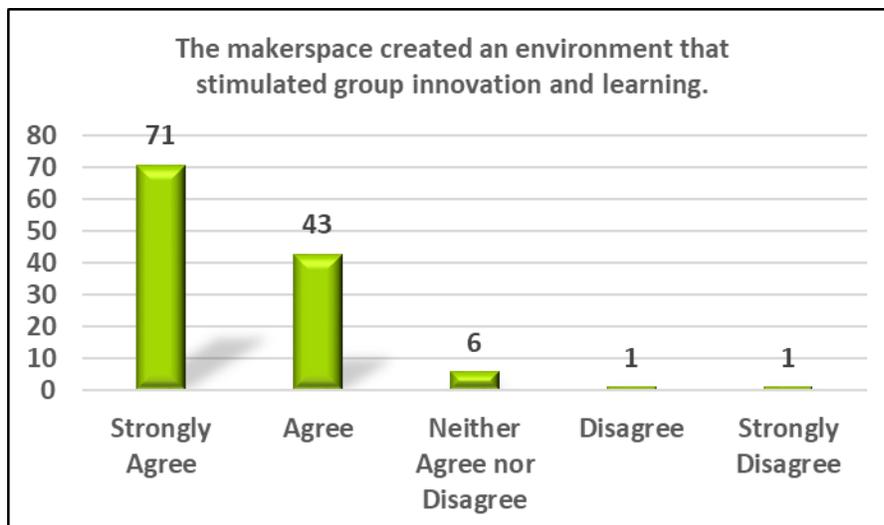


"Adults who were used to creating, really found their hidden talents with this equipment. Many of these adults never would have had the opportunity to use equipment like this to the extent that they did without our makerspace."

"Teachers of students who utilized the Innovation Studio as a class were more engaged in class and looked forward to future projects. They also came in independently with other projects. "

"It was amazing seeing so many members of our community come together in this common place. We had many people who very rarely, if ever, used our library in the past come in and take advantage of this makerspace."

"We were able to share this concept with multiple 4-H clubs from multiple counties and four different schools. Watching the children learn about the potential use for this type of equipment was amazing."



"I witnessed activities taking place between generations of people sharing the same commonality."

"I believe it was a nice addition to the library and believe it brought new patrons to the library. Although we are retired and elderly, we believe that it could help with new hobbies and business for the younger ones! Enjoyed learning new things and visiting with the younger participants."

"This was an exciting fresh thing to roll through the library and community. I hope it returns or permanent options via the library or a makerspace can be established in the community."

"The yoga business printed vinyl signs, the Diner used the laser for coasters, and the glamper ladies printed off t-shirts."

