

Making Makers In Your Community Makes Sense

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Executive Summary

Background: Making is a hot topic in many educational organizations, including libraries. For rural libraries, new trends raise concerns about staffing, hosting, and funding new initiatives when staff may feel overwhelmed by current program needs. Staff from the state libraries in Idaho and Montana have developed projects to introduce the making concept to libraries throughout the state. Cara Orban, Montana State Library Statewide Projects Librarian, and Sue Walker, Library Consultant at the Idaho Commission for Libraries, collaborated to develop a better understanding about making in the two states' rural libraries.

Methodology: Library staff in the two states were invited to complete an online making survey which focused on the following topics: materials, training, space, partnerships, cost, and programming. Follow-up was conducted to elicit more specific information on some questions. Staff from two libraries in each state were interviewed to highlight their programs in more detail. The information is compiled in an electronic document that contains the survey questions, each library's response to the survey, the full responses from each of the four highlighted libraries, and summaries of responses to each question. The survey is arranged by library size to allow libraries to identify libraries of comparable size if desired. This document can be downloaded here:

<http://libraries.idaho.gov/files/ExecutiveSummaryOctober2015.pdf>

Respondent overview:

- Response: 35 individual libraries: 28 public, 2 school/community, 4 high school, 1 middle school. In addition, 4 library branches from 3 different library organizations submitted responses, and staff from 4 libraries submitted more than one response. All submissions are included in the electronic document.
- Respondent demographics: Library size was determined by the number of cards issued for public libraries, and the student enrollment in school libraries. Libraries were segmented into the following categories: <5000 card holders, 5000-15,000 card holders, > 15,000 card holders.

Survey findings:

- **Materials:** A large variety of materials are used in making. Since the Montana State Library and the Idaho Commission for Libraries have provided materials to libraries in both states, those materials were the most commonly listed. Science, Technology, Engineering and Math (STEM) tools currently are generating interest, especially newer tools such as 3D printers. However, the materials used include everything from construction and deconstruction, textiles, photography, robotics, circuitry, and creating music and movies. The type of materials used depends on the community's needs.
- **Training:** Most of the respondents had received some formal training as part of the projects sponsored by the two state agencies. This training was supplemented by hands on experimenting and learning from others. Training needs expressed focused on better knowledge of STEM topics such as robotics, engineering, and 3D printing. Respondents also noted programming ideas would be useful.

- **Space:** More than 50% of respondents do not have a dedicated Maker Space. Meeting rooms, teen spaces, and other library spaces are used as needed. Space components most libraries include: tables, computers, shelving, and access to electricity. Components depends on the tools used. Access to the space used for making varies widely. An equal percentage of libraries provide access whenever the library is open and only when maker programming is occurring. Most are as flexible as space and other programming allows.
- **Partners:** Partners are an integral part of making. 100% of respondents listed at least 1 partner, two thirds listed 2 partners, and 11% listed 5 partners. Partners included trainers such as teachers and professors, musicians and artists, and volunteers to help with activities. In-kind partners provided supplies, refreshments, and publicity.
- **Cost:** Initial costs depend on the types of materials purchased, and many libraries received tools from their state agency. 25% of libraries estimated the initial cost was less than \$1,000.00 and 70% less than \$5,000.00. Comments focused on the ability to start small and add tools as needed. Several libraries used grant or gift funds or received material donations.
- **Programming:** Many respondents had access to STEM materials provided by the state library agencies and used these resources with teens and other audiences. 3D printers are a big draw- even if participants are not designing or printing themselves. However, other programs such as knitting, construction/deconstruction, and circuitry are also popular. Programs that were initially designed for teens and tweens have expanded to include other audiences.
- **Program goals and achievement:** The reasons for incorporating making into library programming are diverse, but all focused on providing more access to different resources to a variety of audiences. Most respondents feel they are slowly reaching these goals, but the progress is slow and varies from library to library.
- **General comments:** Comments covered a variety of issues and should be reviewed in their entirety. General themes and accompanying comments:
 - Don't be afraid or intimidated
Don't be overwhelmed just take baby steps and it will all come together.
 - Start small and build from there
Start small and do it. Watch tutorials online, experiment and get your hands dirty. Try everything first that will help ease fears and don't be afraid to make mistakes.
 - Don't try to do it alone-need staff support and partners
Staff must be interested and excited about the activities they choose to offer to the public. There are many activities and a library may choose some and leave other activities for partner organizations to offer outside the library. The library should be open to having guest instructors who are experts in their field. If a volunteer will help in the lab as a regular instructor or mentor, run a background check on that person and provide them with a "volunteer" name tag so they are perceived as official.
 - Making is a culture which requires community involvement
The community that you are serving should guide the programming that is provided.

Responses by Library size

Guide:

Fewer than 5,000 library cards issued or school population: 15 libraries

5,000-15,000 library cards issued or school population: 6 libraries

More than 15,000 library cards issued or school population: 14 libraries

Fewer than 5,000 (15 libraries)

What types of machines and tools have you used in making?

- Circuits 12
- Computer 8
- Textiles 12
- 3D printers 5
- 3D printing has been going on in other parts of the building but we haven't used it in our Makerspace (yet!)
- Basic wiring, legos. K'nex.
- Cricut TM, (Die Cut Machine)
- FischerTechnik, Legos, MOSS robotics, Strawbees (straw and connectors). We have also ordered a CNC Router and a set of 3Doodler2s (3D drawing pens), rocketry supplies
- Soldering
- Soldering, deconstruction activities

Which materials attract the largest number of users?

- Circuits 9
- Computer 3
- Textiles 4
- 3D Printer 6
- deconstruction labs and soldering
- Food

Comments:

- Often the number of children we get can depend more on the day than what we are doing but 3D printing seems to be the one they came for specifically the most.
- They are all popular. The kids seem to jump from one thing to the next. The Arduino and Raspberry Pi are definitely for more sophisticated coders but we have had couple of kids try it.

Which materials attract the least number of users?

- Circuits 2
- Computer 4
- Textiles 3

Comments:

- They are all about the same-- curiosity is the key
- We have only done these a few times.
- We offered jewelry, paper bowls, journal of school year and make your own fabric into a bag (all no cost involved).No students were interested in any other type of project.

What tools/materials do you wish you had?

- Circuits 3
- Computer 4
- Textiles 5
- 3D printers 8

Comments:

- 3D scanner, and more consumables one example would be more e-textile materials so that we had enough to really explore this with a group and let them keep them. One problem is with new things that you get you also have to have someone that knows how to use them.
- A different 3D printer. And a sewing machine dedicated to the library.
- I just purchased a Snap Circuit Kit and a MakeyMakey kit.
- more staff
- We really haven't done much with the sewing machine and LED textiles. I hope we will be able to experiment more with that soon.

What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training:

- Self – 7
- Other staff – 4

Learned from attending other maker activities:

- Self – 4
- Other staff – 1

Watched videos and learned on my own:

- Self – 11
- Other staff – 7

Had a mentor:

- Self – 2
- Other staff – 3

No training – just jumped in:

- Self – 7
- Other staff – 4

Comments:

- Our training with the ICFL has been invaluable. Also partners are a must, myself and staff don't have enough hours in the day to do our jobs and learn all the Maker skills we would like to share. Bringing in those with knowledge and skills means we can do many things that just wouldn't happen otherwise.
- I did have some brief training from MSL when I borrowed the STEAM trunk and participated in the MakerSpace Pilot Project; but for most projects, I have just "jumped in".
- We just tried to find out as much as we could from articles and videos. Then, we attended the Webinar put on by the MT State library and that really helped us figure out what a Makerspace could be all about.

In retrospect, what additional training would have been useful?

- Time is a big factor for us, or lack thereof, any training is specific activities so that we wouldn't have to research and learn things on our own would help. Even multiple ideas for the tools we have.
- Lots of training. Plenty of information out there, but it is overwhelming and I needed hands on face to face training. Don't like webinars.
- More regional training
- makey makey
- Training on how to set up an effective makerspace (space, content, etc.). Also training and advice for developing partnerships to support making.
- Additional training would have helped with my comfort level - but in the end, the participants were willing to test things out - and someone in the group always seemed to have a little experience with which ever machine we were using - so I mainly facilitated the program.

- I wish I would have had training on arduino, raspberry pi, micro controllers and open source hardware and software to use these. We have a CNC milling machine that we have found very hard to use and I wish we would have had training on it.
- I would have really like to go visit another Makerspace in MT. I know there are several around the state and it seems like the easiest way to learn and understand is to actually watch it in action.
- I'm not sure, we haven't done much.
- ??? Circuits
- day long training on technology parts of kit
- Honestly it is a time issue as with all things. It is not that the training is not good. It is the time that we lack for having additional training. Learning about these things could be a full time job. Some people need the basics. Some just want to jump right in. I think that without more days of training involved the current training we have had is the best possible.
- I am in the process of getting/using a 3D printer. It is VERY isolating since I do not know programming. It's been an interesting experience, but I wish I had a network of go-to folks that I could call and say "HELP!!!!"

Do you have a space used exclusively for making activities?

No - 6

Yes - 7

If yes, where is the space located?. If no, where do your making activities take place?

- We used our conference room during the four week testing block.
- Our making activities currently take place at the front of the Library and in the childrens area. With the turnout we have had we can use up all of the Library space available easily. We are working on a renovation to have a dedicated space in the back.
- We started with a 5x8ft space that was at the far end of our building. The circulation and staff work areas are in the center. We moved our MakerSpace across from our staff area in a 16x11ft area where we can see it and now feel more comfortable leaving things out where we didn't before.
- Adjacent to teen area
- in library corner
- The space is in our Teen Room.
- The space is located in the back corner of our one room library.
- Right now, we have just taken over a few tables and shelves in our library. In the future, we may look to use a space that is currently being used in another way.

- In a corner of the library. All art/craft project material is out for use. Electronic activities are set out during pre-announced and planned times.

What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink - 6

Tables - 13

Computer - 4

Projector - 2

Screen – 3

Comments:

- Workbenches and stools, tool boxes, and one computer. We do have a projector and screen we can bring in. We have folding 4ft tables and folding chairs that we can use when we need them (alot). This space is next to one of our bathrooms so we have access to a sink as well.
- There is a closet dedicated to all the Maker stuff in that room.
- Our library has access to the other components but the tables are the most basic item in the space we have.
- Just a counter, table and chairs. Set up two irons and 6 sewing machines. Also had a cutting station.
- Shelves, powerstrips, containers, craft supplies, small tools (screw drivers, pliers, etc.)

When is the space available for making activities?

Whenever open - 10

Special hours - 5

By appointment - 3

Formal programming - 3

Comments:

- Currently, we have just been hosting Open Houses after school for both HHS students and HMS students. We would like it to be more open if we create a more permanent space in the future.
- If they want help they need to make arrangements or come to the formal programing.
- only basic making materials such as art supplies are left out to be used any time
- Unless there is another activity going on anyone can access that room at any time.

Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

- K-12 Schools - 8
- College/University - 0
- Community experts - 7
- Local businesses or vendors - 3
- Community organizations - 3
- Local makerspace - 0
- Friends/Foundations - 1
- State Library/ other libraries - 5

What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

- 0-\$1,000: 4
- \$1K-\$5K: 4
- \$5K-\$10K: 3
- \$10K+: 1

Comments:

- makey makey, snap circuits, circuit blocks, squishy circuits, conductive paint and thread, etc., to get started with some basic programs
- This includes just what the library spent and donations. It does not include any of the training and materials we have received from the ICFL. We have purchased MOSS robotics, Makey Makey's, Strawbees (straw and connectors with die cutters and die cut machine), Circuit Blocks (4 large sets), Squishy Circuits (made our own large group set from scratch), rocket kits, parts and engines, CNC Router, education set of 3Doodler2's, Quirkbots (robotics to go with Strawbees), rocket kits/engines, and other things. I try to buy reusable kits or sets that will allow us to do group activities. I see this as an investment in our community's children and have focused our programming budget (other than story time) and any extra funds that I could appropriate on the MakerSpace. The tools and equipment purchased will be able to be used for years to come. Other materials provided by the ICFL include Legos, FischerTechniks blocks and robotics, 3D printer, Arduinos, and tools. They have also provided us with 2 years of hands on staff training.
- This number is because with the grant already in place we estimate we are receiving close to \$5000 in support already if you factor time and training. Our space is not easily renovated so to do a proper job at creating a dedicated space (something I consider needful if you want to do basic making). Plus materials costs it would most likely be another 2-3000 total to have everything needed.

- We have begun to price out the components included in the kit we borrowed from the MT State Library and if we add the 3D printer equipment, we would probably be looking at \$4-5000
- We no longer have a Family and Consumer class, so the sewing machines from that class were put to use. They also had two irons.

Where did the initial funding for making come from?

- Library budget - 9
- Grant: - 6
- Gift funds: - 2
- Material donations: - 5

Comments:

- Because we are a School & Community Library, I have been able to participate in an enrichment program through the school called 21st Century learning. They encourage partnerships and provide some funding for materials.
- If we create a more permanent Makerspace, we will apply for grants and rely on the technology budget from our building (if we can convince our Administrators to spend some if on this!)
- Not counting the ?thousand(s) plus from the ICFL, our library has invested about \$10,000 roughly. About \$2000 of this has been donated.,
- some kits were prizes from previous icfl ttw or trw contests
- Supplies given as part of the Make It at the Library program.
- The project didn't involve any money. Students brought plastic showing bag that we fused. I used a pattern I found on the internet and we already had the machines and iron. We also made paper bracelets, necklaces and bowls that didn't involve any money.
- Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

- One program that the 13-18 year olds like is soldering. I would say that by enthusiasm level, the 3rd and 4th graders at Castleford Elementary, would have repeat programs with the Brick Lab (Lego) because it helped them see the math concepts that they were working on a little better. I have also had the most requests to come back from those kids. We also have perler beads that I let the teens use regularly and they really enjoy those.
- Rocket Club has been most successful for us. We have been doing this program for about a year now. We started out saying 12 and older but have allowed younger children to participate if they have an older sibling or parent assist (at least initially). A majority of

the kids are 10 to 18. We used rocket kits initially and have then moved on to having the kids build with parts to create their own rocket designs. As part of the summer reading program last year the library also supplied limited engines for the launches, this year we are asking them to pay \$2 an engine (bulk buy cost). Our partner, Paul Adamson has facilitated the program and is teaching the kids rocket science and skills. They have also been working on Arduino controlled launch controllers. Initial promotion was as part of Summer Reading. We have put it in our weekly paper several times and advertise it with our weekly Maker activities at the school and library. The kids have loved it! The kids always want to build bigger rockets (which we are starting to do) and blow things up (which we try to only do under controlled circumstances). We have had a core group of kids with us throughout the year with some that come and go as well. They do love that they get to keep their rockets (if they don't lose them launching them). Some of the kids have made as many 7 to 10 rockets.

- Legos have been most successful so far.
- One of the most successful program was when I took the Brick Lab out to Castleford School and worked with the 3rd and 4th grade classrooms. The teachers invited me in and the kids loved it so much that the teachers invited me back. Even when the students were using the Brick Lab for math they were excited to learn because it was hands on and visual.
- 3D printing contest with MLD. Nick Grove came out and presented a lunch program on how to use Tinkercad, then we gave students two weeks to make their own design and submit it for the contest. The winner in each grade level had their design printed. We had 17 submissions, but many more than that -- and many students who don't usually come to the library -- came in and learned about Tinkercad and watched a demo of the 3D printer. LABbies promoted it with posters, announcements, and word of mouth. Many students talked about this for a couple months after, and marveled at the demo print that we left out on display.
- Our most successful program was a Brush Bot party. Community members of all ages were encouraged to attend. We used kits purchased from Makershed and promoted the program on our website, by word of mouth, and through social media. Several participants asked for additional family programs, and everyone we asked said they enjoyed the process and playing with the bots.
- One of our most successful making program was a partnership with a neighboring 2-room grade school to participate in the Montana State Library's MakerSpace Trunk Pilot. Parents and teachers helped 36 students in "centers" throughout the library. During their visit, the students made buttons, used a sewing machine, Snap Circuits, Brick (Lego-type) activities, and Squishy circuits. Another successful program was Spindle Spinning. A volunteer demonstrated how to spin wool using a dowel and a CD! The kids loved it and it turned into 3 more classes. While the program using Cricut Die Cuts was not as well attended, it was a program that seemed to be well-liked.

- We have had more than one successful program. 3D printing is always successful. We have an audience age level from 8 years old to adult and an average attendance of 5 to 25 depending on the day. Materials used are the 3D printer, filament, and computers. We have participants set up a Tinkercad account and plan and design a print. We then print off their design. Troubleshooting and learning as we go. We have partnered with schools and a local 4-H group. We promote through our website, flyers, Facebook, and word of mouth. Participant feedback has been positive and they are excited to see their design get printed. The only negative feedback we have received is that of not having more printers.
- So far, we have had a really good experience partnering with a HHS science teacher and a HMS science teacher to bring kids in after school for an Open House setting. The students jumped right in and had a fun time and the educators who participated really learned a lot from how the students interacted with the different components of the kit.
- Soldering with teens, run by a volunteer. Kids loved it. Promotion was through regular venues: newspaper, online and schools and also word of mouth.
- Since we haven't had a sewing class at our high school, both girls and boys jumped at the opportunity to make something with a sewing machine. There was no cost involved because we used plastic bags. The students loved it and were very excited about the finished project.
- The kids liked the fingerprint activities. We only had a handful in attendance and the program was run by a volunteer.
- Our most successful Making program was our Family Take Apart Night at the Library in April. We had 48 people age range from 2-63 in the Library pulling apart computers and other electronics. At one point we had a group out on the sidewalk in front of the library hammering on a computer case. It was just pure fun.
- So far it's been any activity with Teen Tech Week, especially the soldering robot badges. Deconstruction labs have been popular as well. I think the 3D printer will be successful if I can get the thing to work.

What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM related programs - 11
- Provide more afterschool activities - 9
- Get more teens involved with library programs - 10
- Increase community participation - 10
- Attract different populations to library programs - 12

Have you made progress toward your goals?

- Yes - 11
- No - 1

Comments:

- I would say we are making progress in all of the areas marked in #15. The most difficult for us has been to get teens involved. We have had a handful of teens which is a definite improvement on none and we are hoping that our kids will stick with us as they grow and then we will have more teens!
- We are slowly starting to attract attention to our maker program, and have received positive feedback about the activities we have done. Progress has been slow in the beginning, but we are gaining momentum in building the program.
- I believe that the events are becoming more popular and local patrons and students are visiting the library to participate in Maker events.
- We have been pretty successful in progressing towards these goals. We are providing more STEM activities in the library these activities are attended by many ages and are geared to many ages. We have some programs that pull in more teens than other programs. Our group of tweens has increased. We are building good foundations with our programs and we have seen an increase in attendance by many ages including adults and teens as well as younger children and tweens.
- Yes but we are so dependent on volunteers that we haven't had a consistent Maker program
- Slowly but surely. For our Family Take Apart program we had a family attend from a different town who didn't even have a Library card. It was great.

Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

- Get as many staff members excited about it and involved. Look for people who are interested and/or have knowledge in STEAM areas in your community. The more people you can have to help with different activities the better. One or two staff members can only know so much or spend so much time researching and learning, at least in our small library we have found this to be true. Our programming has been geared toward teens/tweens and is attended by children 3 to 18, but Making is for all ages and we are slowly pulling in adults. Enthusiasm, passion, a love to share and learn are a must! We all learn together and I believe that is part of what a MakerSpace is about. We could have implemented a MakerSpace for less money I am sure but since I was able to I figured why not do it. I would say don't let not having a lot of money stop you from trying. Part of implementing a MakerSpace into a library is a mindset. Looking at all your activities and seeing how you can implement making into them. This allows you to use budgets you already have. Just jump in!
- I just wish that more of our library staff was willing to jump in and help with any Maker projects. It feels like they are afraid of them and don't want to invest the time to learn more.

- Jump in. Even if all you can afford or understand is a \$25 kit of straws and connectors, put them out for students/patrons to use and play with and sit back and watch the creative process in action. This will show you that you'll just want to do even more hands on, making activities.
- It's more difficult to get an effective makerspace established without strong partnerships and specific goals in place. Planning ahead of time is very important.
- Start small and do it. Watch tutorials online, experiment and get your hands dirty. Try everything first that will help ease fears and don't be afraid to make mistakes.
- Educate yourself as much as you can, think about as many possibilities as you can but then just dive in. I think we learn how to adjust this programming as we see how the students/teachers use it. We have a long way to go in figuring it all out but I think we are on the right track.
- This is something you have to be prepared to devote time to. The more time you put into it the more you will get out of it.
- Just start small and have fun! Lots of seniors who are mechanical or creative enjoy sharing their expertise-- tap into those resources for maker spaces as well.

5,000-15,000 (6 libraries)

What types of machines and tools have you used in making?

- Circuits – 4
- Computer - 4
- Textiles - 4
- 3D printers – 2

Comments:

- We also have a snap circuit kit available for in library use. This is available from our circulation desk.
- We have made lots of things with paper. Things like origami, Fashion Designing, Zentangle, paper airplanes and Helicopters. Because of low budget and very small space.
- Cubelets
- Vinyl Cutter, Acuquilt Fabric Die Cut machine

Which materials attract the largest number of users?

- Circuits - 3
- Computer - 1
- Textiles - 2
- 3D Printer – 1
- the Makey Makey piano that is a favorite.
- Cubelets
- Vinyl Cutter, Fabric Die Cutter

Which materials attract the least number of users?

- Circuits - 1
- Computer - 2
- Textiles – 0
- 3D Printers – 1

What tools/materials do you wish you had?

- Circuits - 1
- Computer - 1
- Textiles - 1
- 3D printers - 3

What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training:

- Self – 5
- Other staff – 3

Learned from attending other maker activities:

- Self – 4
- Other staff – 2

Watched videos and learned on my own:

- Self – 6
- Other staff – 3

Had a mentor:

- Self – 2
- Other staff – 1

No training – just jumped in:

- Self – 0
- Other staff – 0

In retrospect, what additional training would have been useful?

- As I have attended Paloosa and other training it has been fun to get hands on with some of these "ghost or stealth" programs that other libraries are having success with... It has also been a good resource for ideas.
- all of it was useful.
- I am well pleased with the training we received. The only suggestion I have might be to have like a video presentation of Maker activities from 1st or 2nd round libraries. The range of activities should be from the very simple to the more complex. Seeing posts on Facebook is great, but watching the activities as they play out might be really useful. There is the component of how to encourage exploration and collaboration in addition to the actual activity. It would be great to see the interactions of others with their Makers.
- computer programing
- More time training with Raspberry Pi, Makey Makey.

- Training on how to teach to a crowd would benefit my staff.

Do you have a space used exclusively for making activities?

- No - 2
- Yes – 4

If yes, where is the space located?. If no, where do your making activities take place?

- We use our help desk a lot. Ghost programs are done in our book cellar.
- I put things out on a card table.
- We have a designated space always set up for the 3D printer, 3D scanner and Vinyl Cutter, everything else is brought out as needed.
- It is a general all-purpose meeting room.
-

What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

- Sink - 4
- Tables - 6
- Computer - 5
- Projector - 5
- Screen - 5

Comments:

Refrigerator, stove, microwave, large popcorn machine

When is the space available for making activities?

- Whenever open - 4
- Special hours - 0
- By appointment - 2
- Formal programming - 2
- Other

Comments:

- We have had scout groups schedule programs with the circuit boards and makkey makey. Otherwise we advertise a scheduled day and time for the program .
- We host a Make It program every Monday. However, during Spring Break and Christmas Break, we set up stealth activities.
- We use a pop up system and bring things out as they are needed.

Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

- K-12 Schools - 0
- College/University - 0
- Community experts - 3
- Local businesses or vendors - 3
- Community organizations - 2
- Local makerspace - 0
- Friends/Foundations - 2
- State Library/ other libraries – 0

What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

- 0-\$1,000 - 0
- \$1K-\$5K - 5
- \$5K-\$10K - 1
- \$10K+ - 0

Comment:

- You can start with small project, then add new stuff as you can afford it. Any way that is how we are doing it, but we are probably the smallest library in the state of Idaho.

Where did the initial funding for making come from?

- Library budget - 3
- Grant - 4
- Gift funds - 1
- Material donations - 3

Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

- We had a scout group come and explore circuit blocks and the Makey Makey piano. Our Friends of the Library were having a meeting at the time. The boys were so excited the Friends decided to donate \$500 for Take Home Make it kits.

- Paper airplanes and the helicopters, got the most so far, though the knitting group has grown quite a lot too. We have adult and kids that participate in the knitting group.
- Our teens love the take apart activities and then they made SteamPunk Art out of the pieces
- Our most successful program is the 3D printer, people have truly embraced its usefulness. The Accuquilt Die Cutting and Vinyl cutter are used regularly as well.
- We had a very successful event in needle felting. Wool felt and design was provided by a local artist and funded by our Friends group. Promotion was made through local newspapers, posters, website and facebook.
- **Maker Camp was a very successful program for us. . We had a fairly consistent audience in conjunction of our summer reading program. The kids loved the activities. We had both a junior Maker Camp (ages 3 -9) and a tween-teen Maker camp (ages 9 – 17).**

Week one: Jr Makers paper imagination with all sorts of craft items to create whatever they wanted. (attendance: 7)

Week two: Jr Makers made and decorated music shaker by folding a paper plate in half and filling it with beans. (stapler)(attendance: 6) Tween-Teen group made glove-a-phones. This is done with a rubber glove, straw, tape and a cardboard tube. (Scissors) (attendance: 15)

Week three: Jr Makers made bird feeders with pinecones, peanut butter and birdseed. (plastic knives) (attendance: 7) Tween-Teen make ice cream by combining half n half, vanilla in a bag, and then placing that bag into a bag of ice with rock salt sprinkled on the ice, and then shake, shake, shake. (Measuring cups) (attendance: 18)

Week Four: Jr Makers spaghetti towers with spaghetti and mini marshmallows. (attendance: 4) Tween-teen 's made a marble roller coaster using sprinkler installation cut in half, funnels, balloons, duct tape, and cardstock. (Scissors) (attendance: 9)

Week Five: Jr. Makers made a variety of paper airplanes and boomerangs out of paper plates and various papers. (attendance: 0) (Scissors) Tween-teen makers made Puff rockets using an empty water bottle, straws and sponges, tape. (attendance: 10)

Week Six: Jr. Makers made galasy slim (glurch) with cornstarch, water and food coloring. (Plastic spoons) (attendance: 1) Tween-teen Makers made brushbots using a toothbrush with the handle removed, foam tape, a cell battery and cellphone vibrator motor. We also used rain gutters cut in half as racetracks. (**wirecutters**) (attendance: 11)

What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM related programs - 4
- Provide more afterschool activities - 3
- Get more teens involved with library programs - 5

- Increase community participation - 5
- Attract different populations to library programs - 3

Comment:

- We hope to develop a program that will increase our youth's curiosity and that will help them see that discovery and exploration can lead to learning and even careers.

Have you make progress toward your goals?

- Yes -3
- No - 1

Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

- Don't be overwhelmed just take baby steps and it will all come together.
- We started out slow, but now the kids and even some adults are coming in to do just the maker space. It doesn't have to be elaborate, to be exciting for the public.
- Know your craft well.

>15,000 (14 libraries)

What types of machines and tools have you used in making?

- Circuits - 11
- Computer - 12
- Textiles - 8
- 3D printers – 10
- Other

Comments:

- Gaming with Minecraft, Xbox and Wii -- Podcasting and music making with a sound booth, mixer and musical instruments -- Photography, video and stop-motion concepts, practice and editing (iMovie) -- Design concepts and practice using Sketch Up - Art and design projects with electronic drawing pads, duct tape, sewing machines, craft supplies, Computer programming with Lego Robotics and Scratch, non-electronic and classic board games. laptop PCs, desktop Macs, Vinyl cutter, 3D Scanner
- Fischertechnik robots and Legos
- Soap making
- Robotics
- Engineering/Construction (Construction bricks, fischertechnik, gears)
- Brick lab, engineering kits
- Cricut machine
- I did a lot of things for younger children. We did Duct tape, and Legos, and Pop-up cards.

Which materials attract the largest number of users?

- Circuits - 3
- Computer - 3
- Textiles - 3
- 3D Printer – 9

Comments:

- Duct tape, Squishy Circuits, and Paint like Michelangelo(Where you draw upside down on the underside of a table- we ended up using markers instead of paint) were all equally popular.
- Fishcertechnik robots and Legos
- Hands-on, approachable, easy-to-understand have been the most successful items. Circuit blocks are by far thee easiest item to get kids to play with.
- Knitting
- Minecraft, sound booth, Lego robots, movie making using the green screen
- Quadcopters
- Robotics (2)

- We had an open house where we invited a variety of groups to showcase their stuff. They included two different 3D printers, Lego Robotics, online gaming, weaving, knitting, bike repair. That was our best attended workshop.

Which materials attract the least number of users?

- Circuits - 3
- Computer - 3
- Textiles – 3
- 3D printers – 1

Comments:

- But only because 3D printers are newer and knitting has an established patron base.
- Hard to determine.
- Snap Circuits don't attract use, but if we demonstrate them, teens like them and will continue using them. (Our space is dedicated to teen use.) The Vinyl cutter does not get used because it is an unfamiliar machine and we have only demonstrated it once.
- We sponsored a program called Hunger Games that had been popular as a course in the community adult ed. series. The teacher talked about preparing healthy meals on a budget. We only had 4 people attend.
- Legos and pop-up cards.
- I wouldn't say Arduino attracts the least number of users, but I would say it's extremely challenging. Middle school students in particular get really frustrated sometimes if they have no previous experience with either programming or robots
- Arduinos are fun if you have a captive audience (we took them into a classroom and the kids all enjoyed it). However, attendance at voluntary Arduino programs have been hit-or-miss. We will continue to work with them this summer and see if we can't get more interest. We are trying to think of new ways to demonstrate how learning Arduino can be applied in different ways and how easy the process really is.
- Most of the programming we do attracts a regular number of users. We have any programs that haven't had as many participants however it hasn't been do to the type of program we were providing.

What tools/materials do you wish you had?

- Circuits - 3
- Computer - 5
- Textiles - 6
- 3D printers – 5

Comments:

- Video editing software, hardware.
- Document scanner, Little Bits, a variety of 3D printers in order to test out their operation to be able to choose the best one.
- Ones that are not very complicated work better for us, since we are more for younger children.
- I'd love to try green screen technology. I'm planning to try claymation this summer but I think all that takes is the camera we already have.
- I want to say that I wish we had more plug-and-play type equipment (similar to circuit blocks) just because children seem to understand them quickly, but I feel like children get more satisfaction after learning a more challenging process, like wiring an Arduino. It's much more difficult to get them to try the Arduino.
- CNC machine

What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training:

- Self – 9
- Other staff – 9

Learned from attending other maker activities:

- Self – 6
- Other staff – 5

Watched videos and learned on my own:

- Self – 11
- Other staff – 7

Had a mentor:

- Self – 5
- Other staff – 4

No training – just jumped in:

- Self – 5
- Other staff – 2

Comments:

- We received a grant from IMLS that provided training and mentoring conferences, online meetings and a continuing online community. Some of the staff have changed since we began, but new staff members have been able to visit learning labs in other cities for an onsite experience in a different location. We've had more training than most, but we still have to just jump in to activities because our space is a hybrid. Most spaces will have their own way of doing things, equipment and partners.
- Two or three of us attended workshops on maker activities at MLA and ALA conferences. Some of us watched video training. We talked with the librarian from Imagine IF to see what she had done with her programming. We also worked with our local makerspace contact to develop programs. We looked at makerspaces in other libraries around the country.
- Went to the Fall library workshop, and attended the training there. I tend to be pretty crafty, so it was a good time for me. :)
- I inherited a successful program when I took the job. I learned from the volunteers so I could keep it running.

In retrospect, what additional training would have been useful?

- Lesson (project) planning.
- If I wanted to add something to our training, it would be mentored hands-on mini-courses in robotics, circuitry, computer programming, photography, film editing, Photoshop and InDesign.
- We're still trying to figure that out. Initially, we had a small handful of other staff members who were very enthusiastic but who were in different departments than the 3D printer. We're taking another run at getting as many staff members exposed to and interested in the technology.
- We did not know about the MSL trunks which could have been helpful. We would be interested in learning more about what's involved with having a 3D printer and how libraries with printers provide access to them.
- I guess I would have liked some more hands on training with the computer stuff. I think it seems a little more intimidating than it really is, but I haven't had a lot of experience with computer programming, etc.
- Soldering. I soldered about 20 years ago, but I've lost the knack. Mostly, I wish I had more time to devote to learning and attending maker activities. I also would like to have better "how to" handouts for our students that I create before my programs. Again, time is my limiter. But neither of those relates to training, so I digress. More training time on Arduino, particularly the Gemma, would have helped; I haven't had time to use that yet because I haven't looked up a project that uses it.
- E-textiles, sewing, soldering, Arduino, Evaluation, Stealth Program ideas,

- More time with Arduinos and 3D printing.
- More circuit training for me. And ways to incorporate items into the existing spaces in the library. It was just challenging to carve out time.
- We received our supplies in a kit from Make It Idaho. Sorting the supplies into usable components was a bit challenging once we got back to our library. We received a lot of great supplies from Make It Idaho, but struggled to find projects that used the resources we had, so we ended up buying a lot of additional supplies right off the bat. I guess more ideas for using the supplies we had would have been helpful.
- More training on 3D Design, Raspberry Pi, Arduinos, and the maker movement in general
- A review course on basic electronics.
- Advanced 3D printer training before actually committing to 3D printing.

- All of the materials the ICFL has provided to our Library has been coupled with great training sessions to get staff trained to a point they can provide programming with the materials. Any additional training is always welcome.

Do you have a space used exclusively for making activities?

- No - 9
- Yes – 5
-

If yes, where is the space located?. If no, where do your making activities take place?

- It's in our "teen zone"
- Making activities are held in our meeting rooms. It is a shared space that is used for many purposes by the library and the community.
- No, we have a few tables by the desk we use for storytime stuff, we usually do things there.
- The space is on the second floor of our library in the room next door to our computer classroom. We have 750 square feet to work in, which is small but adequate for up to about 20 people at a time. Our tables can be folded up easily and have wheels, making seating flexible.
- The space that is used at the Makerspace was formerly the small meeting room at the library.
- Usually in one of two meeting rooms; a smaller one on the first floor that is more often available and a larger one on the third floor. We're also going to try 3D printing appointments near the reference desk.
- We have a retrofitted RV, but the space is too small to fit more than 12 people at a time, and most of our projects have been in schools or the library. We hope to have the bus up and running this summer and want to take it to schools in the fall.

- We use our Forrey Room (meeting room). However it is not exclusive.
- **What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.**
- Sink - 5
- Tables - 13
- Computer - 11
- Projector - 7
- Screen – 6
- access to electricity, power strips, chairs
- Shelves with bins for supplies, cubby holes for storage of patron coats and backpacks, locking cabinets for securing equipment, staff desk with computer/printer/scanner, sign-in desk with computer
- There are two re-purposed card catalog drawer boxes in which we have maker supplies. We've included tools (pliers, wire snips, wire strippers), wire, duct tape, LEGOs, batteries, motors, some idea sheets, and various other things. We also have some MAKE: magazines out. We have laptops that we add when we're doing a program, but they're not there when staff are not doing a program.
- We do not have a specific space.
- We have a sink that is close.

When is the space available for making activities?

- Whenever open - 1
- Special hours - 5
- By appointment - 2
- Formal programming - 10
- Other
- Comments:
- At present, the learning lab is dedicated for teen use so it is open for drop-in activities after school and Saturdays. We also have workshops during lab open hours and occasional special hours dependent on the wishes of guest instructors.
- This is a short-coming of our mobile makerspace idea. I would love to offer open-hours for exploration, but have not figured out how to accomplish this yet.
- We have no space except our meeting rooms which makes programming very limiting.

Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

- K-12 Schools - 7
- College/University - 4
- Community experts - 11
- Local businesses or vendors - 4
- Community organizations - 2
- Local makerspace - 3
- Friends/Foundations - 0
- State Library/ other libraries – 3
- Other: IMLS, VISTA

Comments:

- MakerPoint Studios hosted a teen program at their site, led by one of their instructors. This was a one-time event, though we would like to continue fostering this relationship and host other programs together.
- The 5th grade teacher I partnered with also led a workshop, though it was hosted at the library. We have already developed ways in which our resources can be pooled so we can continue working together in the upcoming school year.
- We have partnered with different organizations - the knitters club, the homeschooling group, the local school. The knitters club provided volunteers to help teach classes, the homeschooling group provided volunteers to help conduct maker themed programs, the school provided space and the audience for a program. We approached the school, but were approached by individuals in the other two groups. These were all a one time event. We would probably reach out again. All it takes is time to coordinate.
- I really didn't have any partners for my maker box. Our director at the time wanted us to do something with the maker boxes, and it kind of fell to me by default because we had no Young Adult Librarian at the time. If I did it again, I would probably try and connect with the Girl Scouts and 4-H, because I know some of their kids.

What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

- 0-\$1,000 - 2
- \$1K-\$5K - 6
- \$5K-\$10K - 4
- \$10K+ - 1
- Comments:
- This would include computer equipment (i.e. laptops). However we already have this equipment.

- This includes our 3D printer, which was over \$3,000, and we purchased prior to the "Make It" grant.
- This would cover the costs of an inexpensive 3D printer; several Arduino sets; a few other kits such as MaKey MaKeys, Squishy Circuits, Circuit Blocks, or Snap Circuits; and possibly allow for some staff training or guide books.
- There has been quite the learning curve to learn the technology and figure out ways to implement the technology into meaningful programming. We received a grant, but have had to buy a lot of extra supplies to get going on projects. Our Friends donated \$1000 to help us furnish our mobile makerspace as well.
- We have two MakerBot Replicator 2s (each about \$2,500), laptops to accompany the printers, and hundreds of dollars worth of filament. We've also purchased specialized tools for maintaining the printers and for cleaning up prints.
- \$5,000 - 10,000 would be sufficient in resources for the Makerspace for 3D printing and supplies for replacement parts, and for take away items for visitors.
- We received a \$100,000 grant and will spend all of it plus more that has been received through donations. However, since that is not a normal occurrence, I think a library could grow a program over time with a smaller amount and looking for grants. If \$5,000-10,000 could be dedicated each year, the program would grow and be based on the needs of the particular community. The offerings should be driven by the needs of the users. However, the catch is that sometimes the users need to be exposed to new activities in order to decide what they would like to learn.

Where did the initial funding for making come from?

- Library budget - 6
- Grant - 8
- Gift funds - 4
- Material donations - 2

Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

- The most successful one-time program was our workshop on 3D design using the iPad app 123D Sculpt+. It was geared to grades 5-8, though we had some younger and older students, as well as a few parents join in. We used 10 iPad minis, plus any the participants brought themselves. The group was given a basic introduction to the app, which took about 20-30 minutes. We then allowed some free time to design their own creature using the basic mold, probably about 30-45 minutes. At the end of the program, each participant could email their file directly from the app to me and I printed each one over the next two weeks on our 3D printer. Participants could then come pick them up free of charge.

- The program was promoted through flyers for Teen Tech Week, and in local media. We received very high praise for the program. All participants seemed to enjoy it and they were happy with the finished product from the 3D printer, even if some were not perfect.
- I consider this to be my most successful one-time program because for several reasons. First, it was a unique program that was so popular, we exceeded capacity at both branches. Also, the feedback about the program was all very good and it allowed participants to engage with cutting-edge technology. Finally, it fostered a valuable partnership with a local teacher.
- During national library week we showcased our new 3D printers. We held 4 different workshops on 4 different days in 4 different locations. We promoted the program as part of National Library Week, but also had separate promotions via Facebook, local newspapers and radio for the 3D printer events. Audience members ranged from grade school children to seniors. Feedback was positive with most wondering when we would be holding more 3D printing events or when they would be able to use the 3D printers for their own projects. Groups ranged from 12 individuals to over 40 at an area school. The workshops were conducted by two library staff members. They discussed 3D printing in general, demonstrated the machine, and answered questions. At the school, which is a rural school and more time was available, the librarians 3D printed a cup with the audience.
- I consider the 3D printing workshops our most successful programs even though they had the least amount of hands-on opportunities because the audience was made up of individuals we typically do not see in the library. It shows there is interest in 3D printing if we can work out the logistics. From these 4 different workshops we are in the processing of designing more specific 3D printing programs for our patrons.
- These workshops were also successful because they attracted the interest of community leaders who contacted me directly to learn more about the 3D printers. I believe the library was the first place in the community to own 3D printers. Now the local community college and high school have some.
- Most of my kids were younger, I am going to say from around 7 & down. It's been a year, I do not remember what my most popular one was.
- The one that sticks out in my mind was when we made their own stuffed animals, and they could either color the dinosaur that I drew and make a story about him, or draw their own picture with fabric markers on pre cut fabric squares. We did the picture on one side, and wrote what the dino liked, what his favorite color was, how old he was, etc. on the other side. I would have to go home and look it up if you wanted more specific directions. :) I think all of the children had a good time, that is what I count as a successful program, and they all got to take home something that they liked, and were happy with. If I was going to do it again, I would enlist the help of a parent, and bring another sewing machine, because none of my kids were old enough to sew themselves.
- Robotics. Age range was K-6. Lego Mindstorms, PCS Robotics.
- The program that had the most attendance at one time was a game design workshop led by instructors from a media company in Seattle. On a regular basis, the most popular activities are when we bring in local experts to teach design and engineering concepts. These can be architects, structural engineers, civil engineers, photographers, computer

scientists. Drop-in activities are very popular too. During drop-in times, teens come in and work on projects in their own interest area.

- Our most successful making program has been our 3D Thursday's program. We've had over 500 unique visitors and over 300 unique participants using the 3D printers for free. All ages. Promotion through posters, social media, and local media coverage. During 3D Thursdays, the customer unloads/loads the filament, levels the build plate if necessary, chooses the file and filament color, and hits the print button. Customers can drop-in throughout the day each Thursday in the Gates Room to add their names to the list for 3D printing. First come, first served. There are definitely pros and cons to this approach.
- Our most successful program was the launch party which was described earlier. The next most popular was the last program on gardening presented by Toby Day from MSU Extension.
- I think the Squishy Circuits was pretty popular. We had about 12 participants, used playdough, we usually have kids from let's say 2? to 13. No partners, put it in paper, everybody really liked it. We have been getting more people coming lately, so I think if we did it again, we might have more people.
- Our Teen Tech Week program was an introduction to TinkerCAD, the design program for the 3D printer. It was geared for students in grades 6-12. We promoted it several weeks in advance both in the library, online, and in the local middle and high schools. I also advertised it using online calendars such as KTVB and KIVI. We had about 60 attendees, most of whom said they came to see the 3D printer and that they were very interested in learning more about 3D printing.
- Our most successful making program came about because of a partnership with University of Idaho-Coeur d' Alene. They were hosting camps for middle school girls during the summer, and they asked us to host maker style programs as part of their camps. We talked about 3D printing, squishy circuits, robots, and quadcopters. The promotion was taken care of by University of Idaho. All of the students enjoyed the activities during the camp, and several who I have seen since then remember the activities and still mentioned how much fun it was.
- Our most successful making program is our weekly Make It at the Library program. It is aimed at students age 5-12. We offer Fischertechnik robots, Arduinos, embroidery and quilting, and Legos. Other activities are also offered on an ad hoc basis.
- We have had a lot of success taking circuit blocks to a local park during an environmental fair as well as leaving them out at the library. I feel our most successful program to date has been partnering with a local charter school to guide a class of 8th grade students through the process of wiring and coding an Arduino. We used 6 Arduinos, breadboards, RGB LEDs, and push button switches to make the "magic lightbulb" project from a Make book on getting started with Arduino. We took several USB cords and adapters to plug the Arduinos into outlets once the code was uploaded. We had several laptops, but kept

having troubles with the laptops not recognizing when the Arduinos were plugged in, so we ended up loading code onto the Arduinos from my MacBook Pro.

- I guess that would depend on what is success. We have done some great 3D printing challenges where we have had wide, school wide participation. We visited the school and taught them the basics of Tinkercad, then the school media center allowed them to use class visits working on the projects. We specified how big objects could be and the judging criteria, then had a winning entry for various age groups. Audience level: 1st-5th grade.
- My most successful program would be the DIY Vegan Soap Making. The program was aimed towards adults and required a sign-up sheet online in order to attend the class, all 8 slots were filled. The materials that were used were lye, water, essential oils, and fats. There was promotion through local the local paper and on the library's website. Participant feedback was not taken for the pilot class but will be gathered during the second class.
- It is our on-going knitting classes. We have a knitting group that regularly meets (no advertising required) as well as knitting instruction classes that are offered periodically. We advertise in the newspaper, on FB, in-house flyers and posters, radio ads for the classes. The Community Fine Arts Center is a partner agency with our knitting programs and knitting group. The director of the Community Fine Arts Center provides knitting instruction. Participants enjoy the classes and many class attendees join the knitting group.
- We played a game with a MaKey MaKey where the participants had to close the circuit. They had a race to see how many times they could increase their number and raced against each other. We had 8-10 participants.
- Generally an open session where we provide access to all Maker style materials. We've found good success with this type of program.

What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM related programs - 11
- Provide more afterschool activities - 4
- Get more teens involved with library programs - 9
- Increase community participation - 11
- Attract different populations to library programs -11

Comments:

Attract teens to a space that will introduce them to hands-on learning activities in STEAM (which includes ART in the STEM offerings). The purpose is to allow them to learn that they have talent/interest in areas in which they do not have regular experience. We hope to encourage them to stay in school, go to college and study in STEAM career paths.

- Take technology into the community, increase public library visibility in the community

Have you make progress toward your goals?

- Yes: 10
- No: 2

Comment:

My vision for this program is to take monthly makerspace projects into classrooms. Our Arduino program this spring was a great experiment to see what does and does not work. This summer we will be practicing with our maker but in the community. My hope is next fall we will be able to make more strides in getting programming to students in their schools.

Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

- Staff needs time to work with Maker projects to gain experience, see how time-consuming projects can be, and set realistic expectations.
- Staff must be interested and excited about the activities they choose to offer to the public. There are many activities and a library may choose some and leave other activities for partner organizations to offer outside the library. The library should be open to having guest instructors who are experts in their field. If a volunteer will help in the lab as a regular instructor or mentor, run a background check on that person and provide them with a "volunteer" name tag so they are perceived as official.
- Don't be afraid. It's okay to tell customers that you're learning about the new technology or technologies right along with them. We're still learning more about 3D printing every week--and that's really the point. It's not about mastering the technology or becoming an expert, it's about being exposed to it, continuing to learn about it, and thinking about the world in new ways. We've seen some great collaboration and connections made between customers while people are waiting for their chance to 3D print.
- Having a designated space would have been very helpful so we did not need to store items elsewhere.
- Don't be afraid to be a little messy. I think I was, a little, but the kids are usually pretty good if you keep a close eye on them. Good Luck! :)
- Focus on creating a culture of inclusive maker programs and events. There are many makerspaces that offer fantastic programs, but they cost a pretty penny to attend. Focus on taking those fantastic programs that combine technology, engineering, and collaboration, and make it available to members that might not have those opportunities otherwise.
- You can't be an expert in everything, but you have to be willing to explore and think outside the box if you are going to make makerspaces fun for your community.
- I would start with staff awareness and training.

- The community that you are serving should guide the programming that is provided.
- Two things are needed: 1. Staff - as budgets have decreased so have staff. The maker movement is exciting and an interesting direction for libraries, but requires staff to execute. Libraries can be better prepared by rethinking how they operate allowing staff to work in different ways. 2. Training - training costs time and money. Rural communities often have less access to face-to-face training. Staff who do not learn as well with videos or written instructions are at a disadvantage. This can slow the implementation of maker opportunities at the library.

Aberdeen District Library

Contact: Stephanie Adamson
Email: Aberdeen@gmail.com

Tell us about the community you serve.

Aberdeen is a farming community with a population of about 2,000. More than 50% of the residents are Hispanic with many speaking just Spanish. The library staff contains 2 full time and 4 part-time employees with a FTE of less than 3.0.

How does enabling making in the library benefit your community?

The community and area have lost many of the traditional entertainment sites such as a movie theater and bowling alley. The makerspace allows many who have not traditionally used the library a safe environment to meet and learn. Different types of tweens and teens are coming into the library to experiment with the different tools.

How were the 3D printer and circuits used?

These were the areas the staff felt most comfortable with plus a volunteer with robotics experience then joined the staff in providing making activities.

Is there a particular reason the textiles/fiber arts tools were not used

The time involved in learning more about these tools restricted their use.

What is one thing that you have learned about making?

It is hard to limit it to just one thing! First, you don't have to know it all-learn as you go and get others to help. Second, makers like to have something to take away with them. We now are including take-aways with activities so the participants can share what they made.

What's next for your maker activities?

In order to give participants more take-aways, during our next series of activities entitled "Fun with Electronics" we plan to include something in each activity for the participants to create and have. For example, at the first activity, participants will create tongue depressor flashlights composed of LED lights. They will learn about circuits to make the flashlights work.

Are you willing to be contacted?

Yes

Which types of machines and tools have you used in making?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey))
- Textiles/fiber arts (sewing machine. loom, knitting, etc.)

- 3D printers

Other (please specify):

- FischerTechnik
- Legos
- MOSS robotics
- Strawbees (straw and connectors)
- We have also ordered a CNC Router and a set of 3Doodler2s (3D drawing pens)
- Rocketry supplies

Which materials attract the largest number of users?

- Circuits (Squishy circuits, etc.), 3D printers

Other (please specify):

- Often the number of children we get can depend more on the day than what we are doing but 3D printing seems to be the one they came for specifically the most.

Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Other (please specify)

We have only done these a few times.

What tools/materials do you wish you had?

Other (please specify):

- 3D scanner
- More consumables one example would be more e-textile materials so that we had enough to really explore this with a group and let them keep them. One problem is with new things that you get you also have to have someone that knows how to use them.

What training did you undertake before planning your making?

- Our training with the ICFL has been invaluable. Also partners are a must; myself and staff don't have enough hours in the day to do our jobs and learn all the Maker skills we would like to share. Bringing in those with knowledge and skills means we can do many things that just wouldn't happen otherwise.

In retrospect, what additional training would have been helpful?

- Time is a big factor for us, or lack thereof. Any training in specific activities so that we wouldn't have to research and learn things on our own would help. Even multiple ideas for the tools we have.

Do you have a space used exclusively for making activities?

- Yes, we started with a 5x8ft space that was at the far end of our building. The circulation and staff work areas are in the center. We moved our MakerSpace across from our staff

area in a 16x11ft area where we can see it and now feel more comfortable leaving things out where we didn't before.

What are the basic components of the space used for making?

- Tables, Computers, Projector, Screen

Other (please specify):

- Workbenches and stools
- Tool boxes
- One computer.
- We do have a projector and screen we can bring in.
- We have folding 4 ft tables and folding chairs that we can use when we need them (alot).
- This space is next to one of our bathrooms so we have access to a sink as well.

When is the space available for making activities?

- Whenever the library is open
- By appointment,

Other (please specify):

- If they want help they need to make arrangements or come to the formal programing.

Please list partners:

- Partner 1: Paul Adamson volunteers his time, organizes and does the activities with the kids. He donates money and supplies, and we get matching donations for time and money from his employer. From March 2015 to date we have received over \$2400 from his employer. Paul provided all the supplies and refreshments for our Rocket Club and Rocket Club Launches.
- As the director's husband he will probably be used in our makerspace for as long as I am director. He has been involved with our makerspace since the planning stages and will continue. We are presently planning a new Fun with Electronics program to start in October.
- Partner 2: Jose Antonio Quezada, a local artist, is presenting a series of art workshops in our
our
MakerSpace. He is donating his time, talent, and materials for this program.
- We are looking at continuing the art activities with Jose in the future including painting a mural on the end of our building.
- Partner 3: Jay Jackman, a retired electrician, helped Paul Adamson to teach 25 kids how to solder.
- This was a one-time occurrence. We may ask him to come assist with other electronic activities, I am not sure how else we would use him.
- Partner 4: Several teachers and a librarian in our school district have partnered with us to bring classes to the MakerSpace. One teacher had students work on TinkerCad during class time at the school. We will continue to partner with the schools to provide maker activities either here at the library or at the schools in the future.

What would you estimate as the cost to implement basic making in your library?

- More than \$10,000,

Please explain:

- This includes just what the library spent and donations. It does not include any of the training and materials we have received from the ICFL. We have purchased MOSS robotics, Makey Makey's, Strawbees (straw and connectors with die cutters and die cut machine), Circuit Blocks (4 large sets), Squishy Circuits (made our own large group set from scratch), rocket kits, parts and engines, CNC Router, education set of 3Doodler2's, Quirkbots (robotics to go with Strawbees), rocket kits/engines, and other things. I try to buy reusable kits or sets that will allow us to do group activities. I see this as an investment in our Community's children and have focused our programming budget (other than story time) and any extra funds that I could appropriate on the MakerSpace. The tools and equipment purchased will be able to be used for years to come. Other materials provided by the ICFL include Legos, FischerTechniks blocks and robotics, 3D printer, Arduinos, and tools. They have also provided us with 2 years of hands on staff training.

Where did the initial funding for making come from?

- Library budget
- Gift funds
- Material donations

Other (please specify):

- Not counting the ?thousand(s) plus from the ICFL, our library has invested about \$10,000 roughly. About \$2000 of this has been donated.

Please describe your most successful making program.

- Rocket Club

Ages: 12 and older (younger children if they have a parent or older sibling to assist)

Tools: cutting boards, exacto knives, tape, white molding/trim wood glue (it dries fast), super glue, rocket kits, rocket parts (for designing their own rockets), and launch pad/controller

Overview: We started by making and launching soda bottle/cardboard rockets and paper air rockets. As the program progressed, we helped the participants build black powder (sport) rocket kits and even design and build their own creations. Participants learned about principles of motion, thrust, stability, and even some aerodynamics. They learned about hobby rocketry and the parts of a rocket including, motors, fins, body tubes, etc. We taught them about rocketry safety, and how to safely launch rockets. We showed them the different levels of hobby rocketry including high power rocketry. We also, discussed what was going in the real world regarding rocketry and space exploration. As a side project we designed and built an arduino powered launch controller. To make rocketry fun we had a number of demonstrations like how motor igniters work, how

motors work, and how recovery systems work. Things burning or blowing up were a big hit of course!

Our partner for this was Paul Adamson. He did the whole program, provided most of the materials, and refreshments.

I considered it my most successful program because of the number of kids that attended, the positive feedback and that we had a large percentage of the kids come fairly consistently over the year long program. It was a very successful partnership. It was informative and fun. We did also learn things that will help us with programming in the future and plan to incorporate into our Fun With Electronics. For example, three hours was probably too long for the kids and we will do more hands-on and take home projects.

What did you hope/expect to achieve through maker activities?

- Provide more STEM-related programs
- Provide more afterschool activities
- Get more teens involved in library programs
- Increase community participation in library programs, attract different populations to library programs

Have you made progress toward your goals?

- I would say we are making progress in all of the areas marked in #15. The most difficult for us has been to get teens involved. We have had a handful of teens which is a definite improvement on none and we are hoping that our kids will stick with us as they grow and then we will have more teens!

Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

- Get as many staff members excited about it and involved. Look for people who are interested and/or have knowledge in STEAM areas in your community. The more people you can have to help with different activities the better. One or two staff members can only know so much or spend so much time researching and learning, at least in our small library we have found this to be true. Our programming has been geared toward teens/tweens and is attended by children 3 to 18, but Making is for all ages and we are slowly pulling in adults. Enthusiasm, passion, a love to share and learn are a must!
- We all learn together and I believe that is part of what a MakerSpace is about.
- We could have implemented a MakerSpace for less money I am sure but since I was able to I figured why not do it. I would say don't let not having a lot of money stop you from trying. Part of implementing a MakerSpace into a library is a mindset. Looking at all your activities and seeing how you can implement making into them. This allows you to use budgets you already have.
- Just jump in!

Drummond School & Community Library

Contact: Jodi Oberweiser

Email: librarydhs@blackfoot.net

Tell us about the community you serve.

I serve a rural community of about 500 patrons; the school has about 200 students. It is a school and community library, and I work as a teacher librarian in the morning and the public librarian in the afternoon!

How does enabling making in the library benefit your community?

Parents in our community count on the library as a safe place for children to be after school and between sporting activities. Hosting making events in the library provides activities for children and offers opportunities to learn a craft or find a focus during their free time. The adults who have participated in making in the library have found a community of people with similar interests and enjoyment in learning how to create or learn something new.

How were the textiles/fiber arts tools used?

One activity that was held over several weeks was Spindle Spinning. A local member of the community brought wool and supplies for participants to make their own spindle spinners out of dowels, rubber washers, and old CDs! She taught about a dozen children from grades k-7 during weekly classes throughout the fall.

There is also a group of patrons who have formed a knitting group that meets in the library twice a month.

Is there a particular reason the computer programming tools were not used?

I think we did actually use the Arduino kit once. However, since I am very unfamiliar with the technology, I was hesitant to use it with a group of students. On one occasion, I invited a student from the junior high science class to view the webcast and set up the kit in the library. The student was able to make a circuit and get the LED lights to blink in a pattern. With a little more training, I would feel more confident in supervising children with computer programming tools.

What is one thing that you have learned about making?

I have learned that I don't have to be an "expert" – but rather provide the materials and the opportunity for making. I also learned that it is okay if the project isn't fool proof – kids learn by doing and actually enjoy the process of seeing what will happen in different situations.

What's next for your maker activities?

In addition to our Lego Club that meets once a month, our library is going to offer a maker event once a month. This month, children will be making crafts with Duct Tape, next month, children will be using Snap Circuits, and in November, children will play games such as

Pictureka. Along with that, the library is going to offer making for adult patrons; beginning with “Pinterest” style crafts. [In July, a volunteer hosted a class in making Pallet Flags and 17 ladies attended!]. Some of the classes for this group will include Cricut classes, calligraphy, and jewelry making. There has even been talk about Poster making, gardening, and story writing. We have decided to call it “Make it!”

Are you willing to be contacted?

- Sure!

Which types of machines and tools have you used in making?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey))
- Textiles/fiber arts (sewing machine. loom, knitting, etc.)
- Cricut TM, (Die Cut Machine)

Which materials attract the largest number of users?

- Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Which materials attract the least number of users?

- Computer programming (Arduino, Raspberry Pi, Makey Makey))

What tools/materials do you wish you had?

- Textiles/fiber arts (sewing machine. loom, knitting, etc.) I just purchased a Snap Circuit Kit and a MakeyMakey kit.

What training did you undertake before planning your making?

- I did have some brief training from MSL when I borrowed the STEAM trunk and participated in the MakerSpace Pilot Project; but for most projects, I have just "jumped in".

In retrospect, what additional training would have been helpful?

- Additional training would have helped with my comfort level - but in the end, the participants were willing to test things out - and someone in the group always seemed to have a little experience with which ever machine we were using - so I mainly facilitated the program.

Do you have a space used exclusively for making activities?

- No

What are the basic components of the space used for making?

- Tables. Our library has access to the other components but the tables are the most basic item in the space we have.

When is the space available for making activities?

- Whenever the library is open; Special hours; By appointment

Please list partners:

- Classroom Teachers; Local individuals with specialized skill; Volunteers
- I had people from the community participate in various ways including volunteer staff, and material donations. One parent donated a bin full of Lego bricks. At one event, I had a nearby country school of 36 students and broke the makerspace into stations. The teachers and parent drivers each supervised stations. A local convenience store provided refreshments for our summer activities.
- I will reach out to these partners again.

What would you estimate as the cost to implement basic making in your library?

- \$0-\$1,000.00

Where did the initial funding for making come from?

- Library budget; Grant; Material donations

Please describe your most successful making program.

- Because we are a School & Community Library, I have been able to participate in an enrichment program through the school called 21st Century learning. They encourage partnerships and provide some funding for materials.
- My most successful program was hosting a neighboring 2-room grade school, Hall Elementary School, one afternoon. Hall School has 36 students in grades k-8. The students had the opportunity to visit many different making stations during the afternoon at the library. There were teachers and parent volunteers who knew how to use the badge maker and the sewing machine and others who helped with the engineering kits and building brick games. The feedback from Hall School was so positive that one of their teachers even borrowed the trunk for a week after our event in the library! While I also used the activities with the classes from Drummond, the groups were smaller and I chose to demonstrate only one activity during a visit. These classes averaged about 10 students in each and lacked the teacher involvement and partnership.
- My program was successful because I have a “captive audience” during the school day! However, for the events I planned after school, I needed more publicity and volunteer help. I also had limited training of some of the engineering modules and was a bit hesitant to even set them out. Since then, I feel more comfortable with allowing the

kids to “fail forward” – and learn by doing. The teachers are becoming more familiar with the terms and are more willing to help promote Makerspace events in the library.

- All in all, it was I received positive feedback from the children and the adults. My administrator allowed me to purchase a Snap Circuits kit and I plan to offer makerspace events in the library again this school year.

What did you hope/expect to achieve through maker activities?

- Provide more STEM-related programs; Increase community participation in library programs
- Attract different populations to library programs

Have you made progress toward your goals?

- I believe that the events are becoming more popular and local patrons and students are visiting the library to participate in Maker events.

Gooding Public Library

Contact: Cindy Bigler

Email: Goodingpubliclibrary@gmail.com

Tell us about the community you serve.

Our one room library serves a community of 3800 with one FTE employee (the library director) and 4 part-time employees (about 2 FTE). The area is prominently agricultural with some light industry. The population is almost 50% Hispanic with 80% of students eligible for free and reduced lunches.

How does enabling making in the library benefit your community?

Most kids do not have access to even basic tools such as Legos. Making gives them hands-on experience with basic and more advanced tools plus gives younger students access to STEM based activities that they do not receive in school. The only 3D printer in town is being used by residents of all ages to build/repair items. We are bridging generations by having different volunteers share their expertise. For example, a retired electrician did a presentation on battery powered motors.

How were the 3D printer and circuits used?

There is a monthly class on 3D print design and printing. There also is a monthly class for all ages on circuitry using snap circuits, circuit blocks, squishy circuits, and little bits.

Is there a particular reason the textiles/fiber arts tools were not used?

We lacked funds to replace consumables and users wanted to take something away with them. We recently received a sewing machine and will begin using that in programs. Funding is very important.

What is one thing that you have learned about making?

Personally, I learned that I can learn additional things and not be afraid. I was afraid of technology and now feel confident I can tackle it and succeed. As a library, we realize if we are creative, we can touch a lot of lives. You can create space to make making happen.

What's next for your maker activities?

This year we are adding macramé and beaded crocheting. We also plan to begin a Friday STEAM activity (there is no school on Fridays) and expand the 3D printing program to accommodate the advancing expertise. A program on Art journals is expanding since volunteers have assumed leadership. This program uses withdrawn books so is inexpensive and recycles materials. A monthly science class for elementary students will give students the opportunity to learn through hands on activities such as rockets. We are working collaboratively with the school

to determine student needs. We plan to continue our twice monthly programs with 4-H. Programs are added as volunteers with expertise are identified and funds for supplies allow.

What types of machines and tools have you used in making?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)),
- Textiles/fiber arts (sewing machine. loom, knitting, etc.),
- 3D printers

Which materials attract the largest number of users?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)
- 3D printers

Which materials attract the least number of users?

- Textiles/fiber arts (sewing machine. loom, knitting, etc.)

What tools/materials do you wish you had? *Respondent skipped this Question*

What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

- Attended formal training Self, Other staff
- Learned from attending other maker activities Self, Other staff
- Watched videos and learned on my own Self, Other staff
- Had a mentor Other staff
- No training-just jumped in Self

In retrospect, what additional training would have been useful?

- I wish I had training on arduino, raspberry pi, micro controllers and open source hardware and software to use these. We have a CNC milling machine that we have found very hard to use and I wish we would have had training on it.

Do you have a space used exclusively for making activities?

- Yes,
- If yes, where is the space located?
- The space is located in the back corner of our one room library.

What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

- Tables
- Computers
- Projector
- Screen

When is the space available for making activities?

- Whenever the library is open

Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

- Partner 1: Gooding School District they plan and workout programs with us. We look for needs of the students and work to meet both their needs and desires to program.
- Partner 2: Gooding County 4-H program- man power to run programs.
- Partner 3: Gooding Rotary club has helped with money to buy items and manpower.
- Partner 4: ICFL- materials, training and people with skills and knowledge to share concerns and ideas with.
- Partner 5: Google maker camp

What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

- \$1,000-\$5000.00

Where did the initial funding for making come from?

- Grant

Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

- We have had more than one successful program. 3D printing is always successful. We have an audience age level from 8 years old to adult and an average attendance of 5 to 25 depending on the day. Materials used are the 3D printer, filament, and computers. We have participants set up a Tinkercad account and plan and design a print. We then print off their design troubleshooting and learning as we go. We have partnered with schools and a local 4-H group. We promote through our website, flyers, Facebook, and word of mouth. Participant feedback has been positive and they are excited to see their design get printed. The only negative feedback we have received is that of not having more printers.

What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs
- Provide more afterschool activities
- Get more teens involved in library programs
- Increase community participation in library programs
- Attract different populations to library programs

Have you make progress toward your goals?

- We have been pretty successful in progressing towards these goals. We are providing more STEM activities in the library. These activities are attended by many ages and are geared to many ages. We have some programs that pull in more teens then other programs. Our group of tweens has increased. We are building good foundations with our programs and we have seen an increase in attendance by many ages including adults and teens as well as younger children and tweens.

Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

- Start small and do it.
- Watch tutorials online, experiment and get your hands dirty.
- Try everything first that will help ease fears and don't be afraid to make mistakes.

Missoula Public Library

Contact: Pam Carlton

Email: pamc@missoula.lib.mt.us

Tell us about the community you serve.

Missoula County has a population of about 100,000, supported by Missoula Public Library's main branch in Missoula city and 7 branches throughout the city and county. The county outside of the city limits is very rural with logging and recreation as the main industries. Within the city limits there is the University of Montana, 2 large hospitals, Federal, State and County government offices and artists and writers communities. There is also a growing community of retirement age residents and several institutions to support those living in poverty and/or are homeless.

How does enabling making in the library benefit your community?

Making in our library and its branches offers services to those who may not have the funds to buy the equipment needed for their maker activities. It is also a great way for the library to build community partnerships and participants to learn about their community and make friendships.

How are the circuits and robotics tools used?

For the Youth Services Department the most used tools are the circuits and robotics. We had a family discovery night and those were the two most popular. Surprisingly the kids really enjoyed sewing and knitting/crocheting as well. I think these are popular because most families can't afford the circuits and robotics or don't have the knowledge. Both sewing and knitting/crocheting have seen an upsurge of late.

Is there a particular reason you can identify that the least popular tools are not highly used?

One reason I can think of is that people don't know all that we have to offer or if they do know they might not understand how the different things may benefit or fit into their lives.

What is one thing that you have learned about making?

I have learned that volunteer "teachers" are extremely important. One person could never lead all of the different activities. I don't have the time to become knowledgeable enough to lead a class for all the possibilities. With volunteers, librarians can concentrate on promotion and gathering supplies etc. and be the "gopher" and learn during the activity.

What's next for your maker activities?

I would like to have more maker activities for those ages 10-14. Hopefully this year our Vista Volunteer will be successful in securing volunteers that can teach those classes most enjoyed by that age group.

Are you willing to be contacted?

Yes

What types of machines and tools have you used in making?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)
- Textiles/fiber arts (sewing machine. loom, knitting, etc.)
- 3D printers
- Other (please specify) soap making

Which materials attract the largest number of users?

- 3D printers

Which materials attract the least number of users?

- Textiles/fiber arts (sewing machine. loom, knitting, etc.)

What tools/materials do you wish you had?

- Other (please specify) CNC machine

What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

- Watched videos and learned on my own

In retrospect, what additional training would have been useful?

- A review course on basic electronics.

Do you have a space used exclusively for making activities?

- Yes

If yes, where is the space located?

- The space that is used at the Makerspace was formerly the small meeting room at the library.

What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

- Tables, Computers, Projector

When is the space available for making activities?

- Special hours, By appointment

Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

- Partner 1 SpectrUM - have supported our space with interested individuals

- Partner 2 Washington Companies - helped fund the Makerspace's Technovation Challenge team
- Partner 3 University of Montana Missoula - provided after school students and volunteers

What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

- \$5,000-\$10,000

Please explain:

- \$5,000 - 10,000 would be sufficient in resources for the Makerspace for 3D printing and supplies for replacement parts, and for take away items for visitors.

Where did the initial funding for making come from?

- Library budget

Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

- My most successful program would be the DIY Vegan Soap Making. The program was aimed towards adults and required a signup sheet online in order to attend the class, all 8 slots were filled. The materials that were used were lye, water, essential oils, and fats. There was promotion through local the local paper and on the library's website.
- Participant feedback was not taken for the pilot class but will be gathered during the second class.

What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs; Provide more afterschool activities; Get more teens involved in library programs ; Increase community participation in library programs; Attract different populations to library programs

Have you make progress toward your goals?

- Yes, the Missoula Public Library has made progress towards the goals of providing more STEM-related programs, providing more afterschool activities, getting more teens involved in the library programs, increasing community participation in library programs, and attracting different populations to library programs.

Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

- The community that you are serving should guide the programming that is provided.

#21



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, May 23, 2015 5:23:14 PM
Last Modified: Saturday, May 23, 2015 7:48:41 PM
Time Spent: 02:25:27
IP Address: 74.36.210.150

PAGE 1

Q1: Contact information

Library	Aberdeen District Library
Contact name	Stephanie Adamson
Contact email	aberdeenlib@gmail.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify)
FischerTechnik, Legos, MOSS robotics, Strawbees (straw and connectors). We have also ordered a CNC Router and a set of 3Doodler2s (3D drawing pens), rocketry supplies

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.), 3D printers,
Other (please specify)
Often the number of children we get can depend more on the day than what we are doing but 3D printing seems to be the one they came for specifically the most.

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify)
We have only done these a few times.

Making at the Library

Q5: What tools/materials do you wish you had?

Other (please specify)
3D scanner, and more consumables one example would be more e-textile materials so that we had enough to really explore this with a group and let them keep them. One problem is with new things that you get you also have to have someone that knows how to use them.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Self
Other (please specify)	Our training with the ICFL has been invaluable. Also partners are a must, myself and staff don't have enough hours in the day to do our jobs and learn all the Maker skills we would like to share. Bringing in those with knowledge and skills means we can do many things that just wouldn't happen otherwise.

Q7: In retrospect, what additional training would have been useful?

Time is a big factor for us, or lack there of, any training is specific activities so that we wouldn't have to research and learn things on our own would help. Even multiple ideas for the tools we have.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,
If yes, where is the space located?. If no, where do your making activities take place?
We started with a 5x8ft space that was at the far end of our building. The circulation and staff work areas are in the center. We moved our MakerSpace across from our staff area in a 16x11ft area where we can see it and now feel more comfortable leaving things out where we didn't before.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector, Screen,
Other (please specify)
Workbenches and stools, tool boxes, and one computer. We do have a projector and screen we can bring in. We have folding 4ft tables and folding chairs that we can use when we need them (alot). This space is next to one of our bathrooms so we have access to a sink as well.

Making at the Library

Q10: When is the space available for making activities?

Whenever the library is open, By appointment,
Other (please specify)
If they want help they need to make arrangements or
come to the formal programming.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Paul Adamson is a computer programmer by profession. He runs our Rocket Club (a year old program that has been very successful), has taught soldering, Arduino, and electronics. Besides his talent he graciously volunteers, his employer matches his financial donations and gives us a charitable donation for his volunteer time (Up to specified amounts).

Partner 2

Jose Antonio Quezada is a local artist and is presenting a series of art workshops in our MakerSpace. He is donating his time, talent, and materials for this program.

Partner 3

Jay Jackman a retired electrician helped Paul Adamson to teach 25 kids how to solder.

Partner 4

Several teachers and a librarian in our school district have partnered with us to bring classes to the MakerSpace.

PAGE 6: BUDGET

Making at the Library

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

More than \$10,000,

Please explain

This includes just what the library spent and donations. It does not include any of the training and materials we have received from the ICFL. We have purchased MOSS robotics, Makey Makey's, Strawbees (straw and connectors with die cutters and die cut machine), Circuit Blocks (4 large sets), Squishy Circuits (made our own large group set from scratch), rocket kits, parts and engines, CNC Router, education set of 3Doodler2's, Quirkbots (robotics to go with Strawbees), rocket kits/engines, and other things. I try to buy reusable kits or sets that will allow us to do group activities. I see this as an investment in our communities children and have focused our programming budget (other than story time) and any extra funds that I could appropriate on the MakerSpace. The tools and equipment purchased will be able to be used for years to come. Other materials provided by the ICFL include Legos, FischerTechniks blocks and robotics, 3D printer, Arduinos, and tools. They have also provided us with 2 years of hands on staff training.

Q13: Where did the initial funding for making come from?

Library budget, Gift funds, Material donations,

Other (please specify)

Not counting the ?thousand(s) plus from the ICFL, our library has invested about \$10,000 roughly. About \$2000 of this has been donated.,

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Rocket Club has been most successful for us. We have been doing this program for about a year now. We started out saying 12 and older but have allowed younger children to participate if they have an older sibling or parent assist (at least initially). A majority of the kids are 10 to 18. We used rocket kits initially and have then moved on to having the kids build with parts to create their own rocket designs. As part of the summer reading program last year the library also supplied limited engines for the launches, this year we are asking them to pay \$2 an engine (bulk buy cost). Our partner, Paul Adamson has facilitated the program and is teaching the kids rocket science and skills. They have also been working on Arduino controlled launch controllers. Initial promotion was as part of Summer Reading. We have put it in our weekly paper several times and advertise it with our weekly Maker activities at the school and library. The kids have loved it! The kids always want to build bigger rockets (which we are starting to do) and blow things up (which we try to only do under controlled circumstances). We have had a core group of kids with us throughout the year with some that come and go as well. They do love that they get to keep their rockets (if they don't lose them launching them). Some of the kids have made as many 7 to 10 rockets.

PAGE 8: Evaluation

Making at the Library

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

I would say we are making progress in all of the areas marked in #15. The most difficult for us has been to get teens involved. We have had a handful of teens which is a definite improvement on none and we are hoping that our kids will stick with us as they grow and then we will have more teens!

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Get as many staff members excited about it and involved. Look for people who are interested and/or have knowledge in STEAM areas in your community. The more people you can have to help with different activities the better. One or two staff members can only know so much or spend so much time researching and learning, at least in our small library we have found this to be true. Our programming has been geared toward teens/tweens and is attended by children 3 to 18, but Making is for all ages and we are slowly pulling in adults. Enthusiasm, passion, a love to share and learn are a must! We all learn together and I believe that is part of what a MakerSpace is about.

We could have implemented a MakerSpace for less money I am sure but since I was able to I figured why not do it. I would say don't let not having a lot of money stop you from trying. Part of implementing a MakerSpace into a library is a mindset. Looking at all your activities and seeing how you can implement making into them. This allows you to use budgets you already have.

Just jump in!

#17



INCOMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, May 21, 2015 6:15:16 PM
Last Modified: Thursday, May 21, 2015 6:17:35 PM
Time Spent: 00:02:18
IP Address: 63.230.119.131

PAGE 1

Q1: Contact information

Library	Ada Community Library
Contact name	Linda Pullicar
Contact email	lpullicar@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	sure!

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q3: Which materials attract the largest number of users?	<i>Respondent skipped this question</i>
Q4: Which materials attract the least number of users?	<i>Respondent skipped this question</i>
Q5: What tools/materials do you wish you had?	<i>Respondent skipped this question</i>

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.	<i>Respondent skipped this question</i>
Q7: In retrospect, what additional training would have been useful?	<i>Respondent skipped this question</i>

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	<i>Respondent skipped this question</i>
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Making at the Library

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Respondent skipped this question

Q10: When is the space available for making activities?

Respondent skipped this question

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Respondent skipped this question

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

Respondent skipped this question

Q13: Where did the initial funding for making come from?

Respondent skipped this question

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Respondent skipped this question

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Respondent skipped this question

Q16: Have you make progress toward your goals?

Respondent skipped this question

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#16



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, May 21, 2015 5:03:50 PM
Last Modified: Thursday, May 21, 2015 5:32:47 PM
Time Spent: 00:28:57
IP Address: 63.230.119.131

PAGE 1

Q1: Contact information

Library	Ada Community Library, Lake Hazel Branch
Contact name	Alex Hartman
Contact email	ahartman@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine, loom, knitting, etc.)
,
3D printers,
Other (please specify)
We have used a variety of materials to create simple machines such as PVC marshmallow shooters, and craft stick catapults to demonstrate concepts like air pressure, leverage, etc.

Q3: Which materials attract the largest number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey)
,
3D printers

Q4: Which materials attract the least number of users?

Respondent skipped this question

Q5: What tools/materials do you wish you had?

Other (please specify)
A full mechanic/woodshop would be super cool.

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self, Other staff
Had a mentor	Self

Q7: In retrospect, what additional training would have been useful?

An engineering degree would come in surprisingly handy in my job as a librarian

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?

Our maker programs take place in a room that is used for our other programs. We did add dedicated storage for the kits and materials that we use for maker programs

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen,

Other (please specify)

Tools, engineering kits, arduinos, a 3d printer, and materials that can be used to build

Q10: When is the space available for making activities?

Special hours

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Citizen Scientific Workshop - provided support as we rebuilt a 3d printer and have been building a second from scratch

PAGE 6: BUDGET

Making at the Library

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$0-\$1,000.00,

Please explain

A small budget could cover the cost of tools and materials that can be used to make simple machines, such as plastic bottles, vinyl tubing, and paper for stomp rockets. A larger budget, though, allows for a more exciting program that integrates more technology.

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We host a program every week called Make It, Code It during which teens have rebuilt a 3d printer, have nearly built a second from scratch, have created and printed their own 3d designs, have learned elements of computer coding, both using drag and drop and typed languages, and have made many of their own creations.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,

Provide more afterschool activities ,

Get more teens involved in library programs ,

Increase community participation in library programs ,

Attract different populations to library programs

Q16: Have you make progress toward your goals?

We certainly have.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#22



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, May 26, 2015 11:23:56 AM
Last Modified: Tuesday, May 26, 2015 11:59:05 AM
Time Spent: 00:35:08
IP Address: 207.108.233.163

PAGE 1

Q1: Contact information

Library	Ada Community Library - Star Branch
Contact name	Denise Burnett
Contact email	deniseb@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	deniseb@adalib.org

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify)
used building kits (Legos, K-Nex, Fischer Technic)

Q3: Which materials attract the largest number of users?

3D printers,
Other (please specify)
I have a core group that comes for everything but the 3D printer was a draw.

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q5: What tools/materials do you wish you had?

3D printers,
Other (please specify)
We share our printer with other branches.

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

I don't know. It depends how the site takes off. I haven't done much of the programing things because I personally don't have the training.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?
It is mostly for Maker but is shared as a meeting room and staff area.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers

Q10: When is the space available for making activities?

Whenever the library is open,

Other (please specify)

If there is nothing else going on in the room (formal program, meeting, etc.) the space can be used just by asking.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Idaho Commission for Libraries
Partner 2	parents and grandparents in the community
Partner 3	Star Outreach

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We made the City of Star, Idaho out of Legos. It was a crazy building frenzy the first week and then using Google map we saw what the buildings really were like and the scale of things. We had an open house to show off the project to parents and people around town.

The 3D printer was a big draw for programs as well.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities

Q16: Have you make progress toward your goals?

Yes. We have a successful afterschool program for Makers aged 7-12. I get teen participation as volunteers to help with the programs and some other teen directed activities.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Be aware that not all staff will be as excited about Maker.

#38



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Saturday, June 20, 2015 12:25:51 PM
Last Modified: Saturday, June 20, 2015 12:35:42 PM
Time Spent: 00:09:51
IP Address: 207.108.233.163

PAGE 1

Q1: Contact information

Library	Ada Community Library Star Branch
Contact name	Bonnie Arriola
Contact email	barriola@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Textiles/fiber arts (sewing machine. loom, knitting, etc.)
 ,
 3D printers,
 Other (please specify)
 3D Doodler, sandering irons, Dremel,

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.), 3D printers

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Self

Making at the Library

Q7: In retrospect, what additional training would have been useful?

Use of other tools

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?

We have a staff work/program room/storage room that is used for our maker activities.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen,

Other (please specify) TV

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

various parents/grandparents.

Partner 2

youth volunteers

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain Maker training, tools & supplies

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We did a deconstruction activity where makers took apart a fax machine to examine the part. The visiting 3D printer was very popular by folks of all ages. All types of circuits and the brick lab with building challenges.

PAGE 8: Evaluation

Making at the Library

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

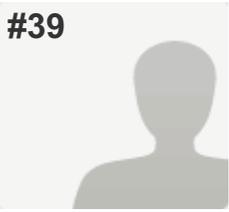
Q16: Have you make progress toward your goals?

Somewhat. Teen here do not seem to be interested.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#39



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Saturday, June 20, 2015 4:15:14 PM
Last Modified: Saturday, June 20, 2015 4:21:03 PM
Time Spent: 00:05:49
IP Address: 63.230.119.131

PAGE 1

Q1: Contact information

Library	Ada Community Library Victory Branch
Contact name	Diane Rice
Contact email	dbrice@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	ok

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Other (please specify) Marble Wall
Q3: Which materials attract the largest number of users?	Other (please specify) Ridged flexible tubing for moving spheres
Q4: Which materials attract the least number of users?	Circuits (Squishy circuits, etc.), Other (please specify) Haven't found a good volunteer to help us use small motors, etc. with wall
Q5: What tools/materials do you wish you had?	Computer programming (Arduino, Raspberry Pi, Makey Makey)) , Other (please specify) To help drive pulleys and winches

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
Had a mentor	Self
No training-just jumped in	Self

Q7: In retrospect, what additional training would have been useful?

More electronic tool assistance would be helpful

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?

Our Makerspace which is also our programming room

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink,

Other (please specify)

Storage for items to use with rolling marble Wall

Q10: When is the space available for making activities?

Special hours,

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	BSU Engineering Department helped to design and build it
Partner 2	ReUseum helped to provide some of the materials for further maker ideas

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$0-\$1,000.00

Q13: Where did the initial funding for making come from?

Material donations,

Other (please specify) Budget provided by BSU

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Had a group of about 15 kids simultaneously playing and designing cooperatively

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#43



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, May 26, 2015 12:34:03 PM
Last Modified: Monday, July 27, 2015 4:49:41 PM
Time Spent: Over a month
IP Address: 63.230.119.131

PAGE 1

Q1: Contact information

Library	Ada Community Library-Victory Branch
Contact name	Derek Ramos
Contact email	dramos@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Other (please specify)
Our weekly Make IT program has a regular audience, so the numbers are fairly consistent, regardless of the topic.

Q4: Which materials attract the least number of users?

Other (please specify)
Our weekly Make IT program has a regular audience, so the numbers are fairly consistent, regardless of the topic.

Q5: What tools/materials do you wish you had?

Other (please specify)
Additional robotics hardware, in order to fully utilize our Arduino starter kits.

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
Had a mentor	Self

Q7: In retrospect, what additional training would have been useful?

Training from individuals with real-world Maker space experience (i.e. have hosted programs with various age groups) would be beneficial.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
In a space dedicated for library programs and public meetings.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Projector, Screen

Q10: When is the space available for making activities?

Special hours,

Other (please specify)
During our weekly Make IT-themed programs, or when the room is not being used. (Legos, blocks, etc. are set out to used by patrons.)

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	David Ultis, from Citizen Scientific Workshop. Supported 3D printer programs.
Partner 2	Paul Verhage, a local school teacher. Supported robotics topics.
Partner 3	Lori Gautier, home school parent. Supported art and crafting projects.
Partner 4	Bryan Hunter, Joe and Jacob Hess. Teen volunteers, have supported topics in Minecraft.

PAGE 6: BUDGET

Making at the Library

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables. \$0-\$1,000.00

Q13: Where did the initial funding for making come from? Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Intro to Minecraft program, or Hour of Code program. Tween audience; laptops and online resources used.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

This topic is fun but prep can be time-consuming due to the nature of STEAM topics. A good tip is to always allot enough staff members and time (prep and during the program) in order for the programs to be successful and truly exploratory for the attendees.

#45



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Wednesday, August 12, 2015 9:19:23 AM
Last Modified: Wednesday, August 12, 2015 10:01:12 AM
Time Spent: 00:41:48
IP Address: 63.230.119.131

PAGE 1

Q1: Contact information

Library	Ada Community Library
Contact name	Derek Ramos
Contact email	dramos@adalib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Circuits (Squishy circuits, etc.), Computer programming (Arduino, Raspberry Pi, Makey Makey))
Q3: Which materials attract the largest number of users?	Other (please specify) Robotics.
Q4: Which materials attract the least number of users?	Other (please specify) Hard to determine.
Q5: What tools/materials do you wish you had?	Other (please specify) Video editing software, hardware.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Other staff
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
Had a mentor	Self

Q7: In retrospect, what additional training would have been useful?

Lesson (project) planning.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
We use our Forrey Room (meeting room). However it is not exclusive.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

David Ultis/ Citizen Scientific Workshop- 3D printing

Partner 2

Mark Wasfy-3D printing

Partner 3

Paul Verhage-Robotics

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain
This would include computer equipment (i.e. laptops).
However we already have this equipment.

Q13: Where did the initial funding for making come from?

Library budget, Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Robotics. Age range was K-6. Lego Mindstorms, PCS Robotics.

PAGE 8: Evaluation

Making at the Library

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Staff needs time to work with Maker projects to gain experience , see how time-consuming projects can be, and set realistic expectations.

#3



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, May 20, 2015 1:31:02 PM
Last Modified: Wednesday, May 20, 2015 1:37:22 PM
Time Spent: 00:06:20
IP Address: 208.98.187.86

PAGE 1

Q1: Contact information

Library	Bear Lake County Library
Contact name	Mary Nate
Contact email	Blkcolib@dcdi.net
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify) Soldering,

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.), 3D printers

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q5: What tools/materials do you wish you had?

3D printers

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
Had a mentor	Self
No training-just jumped in	Self

Q7: In retrospect, what additional training would have been useful?

Lots of training. Plenty of information out there, but it is overwhelming and I needed hands on face to face training. Don't like webinars.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
Adjacent to teen area

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables

Q10: When is the space available for making activities?

Whenever the library is open, Special hours

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Na
Partner 2	Na
Partner 3	Na
Partner 4	Na
Partner 5	Na

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000

Making at the Library

Q13: Where did the initial funding for making come from?

Library budget, Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Legos have been most successful so far.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

We are working on it

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#34



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 19, 2015 9:33:03 AM
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PAGE 1

Q1: Contact information

Library	Billings Public Library
Contact name	Kathy Robins
Contact email	robinsk@ci.billings.mt.us
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify)
Gaming with Minecraft, Xbox and Wii -- Podcasting and music making with a sound booth, mixer and musical instruments -- Photography, video and stop-motion concepts, practice and editing (iMovie) -- Design concepts and practice using Sketch Up - Art and design projects with electronic drawing pads, duct tape, sewing machines, craft supplies, Computer programming with Lego Robotics and Scratch, non-electronic and classic board games. laptop PCs, desktop Macs, Vinyl cutter, 3D Scanner

Q3: Which materials attract the largest number of users?

3D printers,
Other (please specify)
Minecraft, sound booth, Lego robots, movie making using the green screen

Making at the Library

Q4: Which materials attract the least number of users?	Circuits (Squishy circuits, etc.), Textiles/fiber arts (sewing machine, loom, knitting, etc.) , Other (please specify) Snap Circuits don't attract use, but if we demonstrate them, teens like them and will continue using them. (Our space is dedicated to teen use.) The Vinyl cutter does not get used because it is an unfamiliar machine and we have only demonstrated it once.
Q5: What tools/materials do you wish you had?	Other (please specify) Document scanner, Little Bits, a variety of 3D printers in order to test out their operation to be able to choose the best one.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Self, Other staff
No training-just jumped in	Self, Other staff
Other (please specify)	We received a grant from IMLS that provided training and mentoring conferences, online meetings and a continuing online community. Some of the staff have changed since we began, but new staff members have been able to visit learning labs in other cities for an onsite experience in a different location. We've had more training than most, but we still have to just jump in to activities because our space is a hybrid. Most spaces will have their own way of doing things, equipment and partners.

Q7: In retrospect, what additional training would have been useful?

If I wanted to add something to our training, it would be mentored hands-on mini-courses in robotics, circuitry, computer programming, photography, film editing, Photoshop and InDesign.

PAGE 4: SPACE

Making at the Library

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?

The space is on the second floor of our library in the room next door to our computer classroom. We have 750 square feet to work in, which is small but adequate for up to about 20 people at a time. Our tables can be folded up easily and have wheels, making seating flexible.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector, Screen,

Other (please specify)

Shelves with bins for supplies, cubby holes for storage of patron coats and backpacks, locking cabinets for securing equipment, staff desk with computer/printer/scanner, sign-in desk with computer

Q10: When is the space available for making activities?

Special hours,

Other (please specify)

At present, the learning lab is dedicated for teen use so it is open for drop-in activities after school and Saturdays. We also have workshops during lab open hours and occasional special hours dependent on the wishes of guest instructors.

PAGE 5: PARTNERS

Making at the Library

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	School District 2 - main partner for the grant goal of developing a learning lab for teens. They also contribute on our Learning Lab Steering Committee.
Partner 2	IMLS - Grantor for learning lab grant, allowing us to participate in a national community of practice and fund the start-up of our space
Partner 3	Americorps VISTA - VISTA members were hired to set up the space as we purchased equipment, do community outreach to locate instructors and advertise to teens
Partner 4	Local colleges - College students worked as mentors in the Lab and received small stipends each semester, computer science professors provided instruction to teens, college professors encouraged their students to mentor teens in the lab
Partner 5	Billings business community - Chamber of Commerce Education Committee, local architects, engineers, high-tech businesses, media, artists: provided funding for mentors as well as expertise for instruction, advice for equipment, access to public service announcements and TV interviews

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

More than \$10,000,

Please explain

We received a \$100,000 grant and will spend all of it plus more that has been received through donations. However, since that is not a normal occurrence, I think a library could grow a program over time with a smaller amount and looking for grants. If \$5,000-10,000 could be dedicated each year, the program would grow and be based on the needs of the particular community. The offerings should be driven by the needs of the users. However, the catch is that sometimes the users need to be exposed to new activities in order to decide what they would like to learn.

Q13: Where did the initial funding for making come from?

Grant, Gift funds, Material donations

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

The program that had the most attendance at one time was a game design workshop led by instructors from a media company in Seattle. On a regular basis, the most popular activities are when we bring in local experts to teach design and engineering concepts. These can be architects, structural engineers, civil engineers, photographers, computer scientists. Drop-in activities are very popular too. During drop-in times, teens come in and work on projects in their own interest area.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Other (please specify)
Attract teens to a space that will introduce them to hands-on learning activities in STEAM (which includes ART in the STEAM offerings). The purpose is to allow them to learn that they have talent/interest in areas in which they do not have regular experience. We hope to encourage them to stay in school, go to college and study in STEAM career paths.

Q16: Have you make progress toward your goals?

Yes - the teens are enjoying the space and usage continues to have robust growth. This is in contrast to teen use of the classic library offerings. We are still trying to figure out how to follow teens as they grow up to see if these experiences open doors for them in STEAM career paths.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Staff must be interested and excited about the activities they choose to offer to the public. There are many activities and a library may choose some and leave other activities for partner organizations to offer outside the library. The library should be open to having guest instructors who are experts in their field. If a volunteer will help in the lab as a regular instructor or mentor, run a background check on that person and provide them with a "volunteer" name tag so they are perceived as official.

#32



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, June 18, 2015 3:33:29 PM
Last Modified: Thursday, June 18, 2015 4:32:33 PM
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IP Address: 205.189.35.2

PAGE 1

Q1: Contact information

Library	Boise Public Library
Contact name	Heidi Lewis
Contact email	hlewis@cityofboise.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making? 3D printers

Q3: Which materials attract the largest number of users? 3D printers

Q4: Which materials attract the least number of users? *Respondent skipped this question*

Q5: What tools/materials do you wish you had?

Computer programming (Arduino, Raspberry Pi, Makey Makey)
 ,
 Textiles/fiber arts (sewing machine. loom, knitting, etc.)

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Other staff
No training-just jumped in	Self

Making at the Library

Q7: In retrospect, what additional training would have been useful?

We're still trying to figure that out. Initially, we had a small handful of other staff members who were very enthusiastic but who were in different departments than the 3D printer. We're taking another run at getting as many staff members exposed to and interested in the technology.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?
Usually in one of two meeting rooms; a smaller one on the first floor that is more often available and a larger one on the third floor. We're also going to try 3D printing appointments near the reference desk.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Special hours, By appointment,

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Dave Ultis from Citizen Scientific Workshop.
We purchase filament from his company and he has led and participated in some maker events at the library. He has also offered his time and expertise.

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000,

Please explain
We have two MakerBot Replicator 2s (each about \$2,500), laptops to accompany the printers, and hundreds of dollars worth of filament. We've also purchased specialized tools for maintaining the printers and for cleaning up prints.

Q13: Where did the initial funding for making come from?

Gift funds,

Other (please specify)
The Friends of the Boise Public Library gave us the funds to purchase the above.

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful making program has been our 3D Thursdays program. We've had over 500 unique visitors and over 300 unique participants using the 3D printers for free. All ages. Promotion through posters, social media, and local media coverage. During 3D Thursdays, the customer unloads/loads the filament, levels the build plate if necessary, chooses the file and filament color, and hits the print button. Customers can drop-in throughout the day each Thursday in the Gates Room to add their names to the list for 3D printing. First come, first served. There are definitely pros and cons to this approach.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs ,
 - Provide more afterschool activities ,
 - Get more teens involved in library programs ,
 - Increase community participation in library programs ,
 - Attract different populations to library programs
-

Q16: Have you make progress toward your goals?

Yes. Just this week we used the 3D printers as the focus of our National Week of Making activities; we were able to introduce the concept of 3D printing--as well as a fun technology that can be easy to jump into with the right printer and some staff assistance--to dozens of kids who hadn't heard about our 3D printers before or who haven't had access to 3D printers before.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Don't be afraid. It's okay to tell customers that you're learning about the new technology or technologies right along with them. We're still learning more about 3D printing every week--and that's really the point. It's not about mastering the technology or becoming an expert, it's about being exposed to it, continuing to learn about it, and thinking about the world in new ways. We've seen some great collaboration and connections made between customers while people are waiting for their chance to 3D print.

#12



COMPLETE

Collector: Web Link 1 (Web Link)
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Last Modified: Thursday, May 21, 2015 2:16:40 PM
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PAGE 1

Q1: Contact information

Library	Bozeman Public Library
Contact name	Terri Dood or Carmen Clark
Contact email	tdood@bozeman.net or cclark@bozeman.net
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify) Cricut machine

Q3: Which materials attract the largest number of users?

Other (please specify)
We had an open house where we invited a variety of groups to showcase their stuff. They included two different 3D printers, Lego Robotics, online gaming, weaving, knitting, bike repair. That was our best attended workshop.

Q4: Which materials attract the least number of users?

Other (please specify)
We sponsored a program called Hunger Games that had been popular as a course in the community adult ed. series. The teacher talked about preparing healthy meals on a budget. We only had 4 people attend.

Q5: What tools/materials do you wish you had?

3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Self, Other staff
Other (please specify)	Two or three of us attended workshops on maker activities at MLA and ALA conferences. Some of us watched video training. We talked with the librarian from Imagine IF to see what she had done with her programming. We also worked with our local makerspace contact to develop programs. We looked at makerspaces in other libraries around the country.

Q7: In retrospect, what additional training would have been useful?

We did not know about the MSL trunks which could have been helpful. We would be interested in learning more about what's involved with having a 3D printer and how libraries with printers provide access to them.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables,
Other (please specify)
We do not have a specific space.

Q10: When is the space available for making activities?

Special hours,
Other (please specify)
We have no space except our meeting rooms which makes programming very limiting.

PAGE 5: PARTNERS

Making at the Library

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Bozeman Makerspace--provided instruction for 2 workshops and made space available for an open house
Partner 2	Jesse Tode--taught 1 workshop
Partner 3	Karen Ore, Pam Henley, Jamie Henley taught knitting workshop
Partner 4	Jesse Tode--taught 1 workshop on woodworking; Robyn Jones-Shirey--taught 2 Cricut classes
Partner 5	Kate Holloway and 3 friends--taught Halloween Zombie workshop

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables. \$1,000-\$5000.00

Q13: Where did the initial funding for making come from? Gift funds,
Other (please specify)
Our Friends group gave us the money.

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful program was the launch party which was described earlier. The next most popular was the last program on gardening presented by Toby Day from MSU Extension.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable. Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

No. Our programs were initially for adults but we realized that there is a lot of adult programming in our community. We are hoping to shift it towards teens this year if we can get help.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Having a designated space would have been very helpful so we did not need to store items elsewhere.

#8



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Thursday, May 21, 2015 9:41:21 AM
Last Modified: Thursday, May 21, 2015 9:51:22 AM
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IP Address: 72.24.106.10

PAGE 1

Q1: Contact information

Library	Buhl Public Library
Contact name	Amanda Hatfield
Contact email	amandahatfield33@gmail.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	sure

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q4: Which materials attract the least number of users?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify)
A different 3D printer. And a sewing machine dedicated to the library.

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
No training-just jumped in	Self

Q7: In retrospect, what additional training would have been useful?

More regional training

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Screen,
Other (please specify)
There is a closet dedicated to all the Maker stuff in that room.

Q10: When is the space available for making activities?

Whenever the library is open,
Other (please specify)
Unless there is another activity going on anyone can access that room at any time.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Buhl High School Susie Jones Librarian has had me come help her with Maker activities at the school.

Partner 2

The local Boys and Girls Club. We have arranged to do Maker Camp with them

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000

Q13: Where did the initial funding for making come from?

Library budget, Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

One of the most successful program was when I took the Brick Lab out to Castleford school and worked with the 3rd and 4th grade classrooms. The teachers invited me in and the kids loved it so much that the teachers invited me back. Even when the students were using the Brick Lab for math they were excited to learn because it was hands on and visual.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Not really

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

I just wish that more of our library staff was willing to jump in and help with any Maker projects. It feels like they are afraid of them and don't want to invest the time to learn more.

#40



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, June 22, 2015 3:12:24 PM
Last Modified: Monday, June 22, 2015 3:46:15 PM
Time Spent: 00:33:50
IP Address: 72.22.234.178

PAGE 1

Q1: Contact information

Library	Burley Public Library
Contact name	Linda Barney
Contact email	linda@bplibrary.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Sure :)

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify)
We also have a snap circuit kit available for In library use. This is available from our circulation desk.

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify)
the Makey Makey piano that is a favorite.

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Other (please specify)
we had a hard time getting people to come to a coding class

Q5: What tools/materials do you wish you had?

3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
Had a mentor	Self

Q7: In retrospect, what additional training would have been useful?

As I have attended Paloosa and other training it has been fun to get hands on with some of these "ghost or stealth" programs that other libraries are having success with... It has also been a good resource for ideas.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
We use our help desk a lot. Ghost programs are done in our book cellar.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

By appointment,

Only when formal programming is taking plan ,
Other (please specify)
We have had scout groups schedule programs with the circuit boards and makkey makey. Otherwise we advertise a scheduled day and time for the program .

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Cub scout groups have brought their scouts for programs.

PAGE 6: BUDGET

Making at the Library

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$1,000-\$5000.00, Please explain Make it Kits Circuit blocks Robots, Gemma, Arduino 3D printer Bricks Other materials for ghost programs.
Q13: Where did the initial funding for making come from?	Grant, Other (please specify) ICfL Thank you!

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We had a scout group come and explore circuit blocks and the Makey Makey piano.
Our Friends of the Library were having a meeting at the time.
The boys were so excited the Friends decided to donate \$500 for Take Home Make it kits.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs ,
Other (please specify)
We hope to develop a program that will increase our youth's curiosity and that will help them see that discovery and exploration can lead to learning and even careers.

Q16: Have you make progress toward your goals?

It was a slow start, We have new people and a lot of programs we are involved in. We are beginning to see progress in the Make it program. We have some fun ghost programs planned for our summer patrons.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Don't be overwhelmed just take baby steps and it will all come together.

#20



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, May 22, 2015 1:49:15 PM
Last Modified: Friday, May 22, 2015 2:12:28 PM
Time Spent: 00:23:13
IP Address: 66.62.92.252

PAGE 1

Q1: Contact information

Library

Butte Public Library

Contact name

Cathy Friel

Contact email

cfriel@buttepubliclibrary.info

Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.

yes, that's fine.

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),

Computer programming (Arduino, Raspberry Pi, Makey Makey)

,

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

,

Other (please specify)

I did a lot of things for younger children. We did Duct tape, and Legos, and Pop-up cards.

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),

Computer programming (Arduino, Raspberry Pi, Makey Makey)

,

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

,

Other (please specify)

Duct tape, Squishy Circuits, and Paint like Michelangelo(Where you draw upside down on the underside of a table- we ended up using markers instead of paint) were all equally popular.

Q4: Which materials attract the least number of users?

Other (please specify) Legos and pop-up cards.

Making at the Library

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.),

Textiles/fiber arts (sewing machine, loom, knitting, etc.)

,

3D printers,

Other (please specify)

Ones that are not very complicated work better for us, since we are more for younger children.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training

Self

No training-just jumped in

Self

Other (please specify)

Went to the Fall library workshop, and attended the training there. I tend to be pretty crafty, so it was a good time for me. :)

Q7: In retrospect, what additional training would have been useful?

I guess I would have liked some more hands on training with the computer stuff. I think it seems a little more intimidating than it really is, but I haven't had a lot of experience with computer programming, etc.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?

No, we have a few tables by the desk we use for storytime stuff, we usually do things there.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers,

Other (please specify) We have a sink that is close.

Q10: When is the space available for making activities?

Only when formal programming is taking place

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Montana library association

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables. \$0-\$1,000.00

Q13: Where did the initial funding for making come from? Library budget

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

I think the Squishy Circuits was pretty popular. We had about 12 participants, used playdough, we usually have kids from lets say 2? to 13. No partners, put it in paper, everybody really liked it. We have been getting more people coming lately, so I think if we did it again, we might have more people.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Some.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Don't be afraid to be a little messy. I think I was, a little, but the kids are usually pretty good if you keep a close eye on them. Good Luck! :)

#35



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 19, 2015 10:16:44 AM
Last Modified: Friday, June 19, 2015 1:17:07 PM
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PAGE 1

Q1: Contact information

Library	Caldwell Public Library
Contact name	Fiona May
Contact email	fmay@cityofcaldwell.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
3D printers,
Other (please specify) Robotics

Q3: Which materials attract the largest number of users?

3D printers,
Other (please specify) Robotics

Q4: Which materials attract the least number of users?

Circuits (Squishy circuits, etc.),
Other (please specify)
I wouldn't say Arduino attracts the least number of users, but I would say it's extremely challenging. Middle school students in particular get really frustrated sometimes if they have no previous experience with either programming or robots

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine, loom, knitting, etc.)
,
Other (please specify)
I'd love to try green screen technology. I'm planning to try claymation this summer but I think all that takes is the camera we already have.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Other staff
Watched videos and learned on my own	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

Soldering. I soldered about 20 years ago, but I've lost the knack. Mostly, I wish I had more time to devote to learning and attending maker activities. I also would like to have better "how to" handouts for our students that I create before my programs. Again, time is my limiter. But neither of those relates to training, so I digress. More training time on Arduino, particularly the Gemma, would have helped; I haven't had time to use that yet because I haven't looked up a project that uses it.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
It's in our "teen zone"

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables,

Other (please specify)

There are two re-purposed card catalog drawer boxes in which we have maker supplies. We've included tools (pliers, wire snips, wire strippers), wire, duct tape, LEGOs, batteries, motors, some idea sheets, and various other things. We also have some MAKE: magazines out. We have laptops that we add when we're doing a program, but they're not there when staff are not doing a program.

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Vision Charter School FIRST Robotics Team coached students during Teen Tech Week activity

Partner 2

Caldwell Middle and High School science teachers publicized maker events

PAGE 6: BUDGET

Making at the Library

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$1,000-\$5000.00, Please explain This includes our 3D printer, which was over \$3,000, and we purchased prior to the "Make It" grant.
Q13: Where did the initial funding for making come from?	Library budget, Gift funds

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our Teen Tech Week program was an introduction to TinkerCAD, the design program for the 3D printer. It was geared for students in grades 6-12. We promoted it several weeks in advance both in the library, online, and in the local middle and high schools. I also advertised it using online calendars such as KTVB and KIVI. We had about 60 attendees, most of whom said they came to see the 3D printer and that they were very interested in learning more about 3D printing.

PAGE 8: Evaluation

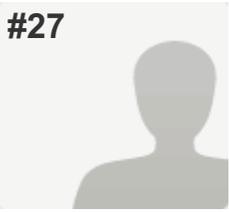
Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.	Provide more STEM-related programs , Get more teens involved in library programs , Increase community participation in library programs , Attract different populations to library programs
---	--

Q16: Have you make progress toward your goals?

We have had more teens involved in library programs, although the teens that are interested seem to be a very limited cross-section of the teens who visit the library. I need to find out what about the programming we are doing now isn't interesting to more teens.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.	<i>Respondent skipped this question</i>
--	---

#27



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 05, 2015 6:34:01 AM
Last Modified: Friday, June 05, 2015 6:51:33 AM
Time Spent: 00:17:31
IP Address: 67.42.167.126

PAGE 1

Q1: Contact information

Library	Centennial High School
Contact name	Gena Marker
Contact email	marker.gena@westada.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey)
,
3D printers

Q4: Which materials attract the least number of users?

Circuits (Squishy circuits, etc.)

Q5: What tools/materials do you wish you had?

Computer programming (Arduino, Raspberry Pi, Makey Makey)
,
3D printers

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Watched videos and learned on my own Self

No training-just jumped in Self

Q7: In retrospect, what additional training would have been useful?

makey makey

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
in library corner

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables

Q10: When is the space available for making activities?

Whenever the library is open,

Other (please specify)
only basic making materials such as art supplies are left out to be used any time

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Meridian Library District - brought out 3D printer and other tech tools for students to explore

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$0-\$1,000.00,

Please explain
makey makey, snap circuits, circuit blocks, squishy circuits, conductive paint and thread, etc., to get started with some basic programs

Q13: Where did the initial funding for making come from?

Library budget, Material donations,

Other (please specify)
some kits were prizes from previous icfl ttw or trw contests

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

3D printing contest with MLD. Nick Grove came out and presented a lunch program on how to use Tinkercad, then we gave students two weeks to make their own design and submit it for the contest. The winner in each grade level had their design printed. We had 17 submissions, but many more than that -- and many students who don't usually come to the library -- came in and learned about Tinkercad and watched a demo of the 3D printer. LABbies promoted it with posters, announcements, and word of mouth. Many students talked about this for a couple months after, and marveled at the demo print that we left out on display.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Some. 3D printing brought in new students, circuits and makey makey brought in STEM and more involvement in programs.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Jump in. Even if all you can afford or understand is a \$25 kit of straws and connectors, put them out for students/patrons to use and play with and sit back and watch the creative process in action. This will show you that you'll just want to do even more hands on, making activities.

#28



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 05, 2015 1:38:17 PM
Last Modified: Friday, June 05, 2015 2:01:14 PM
Time Spent: 00:22:56
IP Address: 207.170.236.218

PAGE 1

Q1: Contact information

Library	Community Library Network at Hayden
Contact name	Nick Madsen
Contact email	nickm@communitylibrary.net
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes, feel free to contact me.

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
3D printers,
Other (please specify)
Engineering/Construction (Construction bricks, fischertechnik, gears)

Q3: Which materials attract the largest number of users?

3D printers,
Other (please specify) Quadcopters

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine, loom, knitting, etc.)

Q5: What tools/materials do you wish you had?

3D printers

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
Had a mentor	Self

Q7: In retrospect, what additional training would have been useful?

E-textiles, sewing, soldering, Arduino, Evaluation, Stealth Program ideas,

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Gizmo-CDA
Partner 2	University of Idaho-Coeur d' Alene
Partner 3	Idaho Commission for Libraries
Partner 4	RoboSprout
Partner 5	Lakeland High School

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000

Q13: Where did the initial funding for making come from?

Library budget, Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful making program came about because of a partnership with University of Idaho-Coeur d' Alene. They were hosting camps for middle school girls during the summer, and they asked us to host maker style programs as part of their camps. We talked about 3D printing, squishy circuits, robots, and quadcopters. The promotion was taken care of by University of Idaho. All of the students enjoyed the activities during the camp, and several who I have seen since then remember the activities and still mentioned how much fun it was.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Incorporating maker style programs into our afterschool programs and storytime events has helped us offer many more STEM-related activities.

We have had multiple outreach opportunities come up because of our maker style offerings that we wouldn't have had otherwise.

Many library members have commented that they didn't realize that we offered services like that at the library.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Focus on creating a culture of inclusive maker programs and events. There are many makerspaces that offer fantastic programs, but they cost a pretty penny to attend. Focus on taking those fantastic programs that combine technology, engineering, and collaboration, and make it available to members that might not have those opportunities otherwise.

#15



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, May 21, 2015 1:28:59 PM
Last Modified: Thursday, May 21, 2015 4:03:33 PM
Time Spent: 02:34:33
IP Address: 216.83.68.30

PAGE 1

Q1: Contact information

Library	DeMary Memorial Library
Contact name	Shambry Emero
Contact email	demary42@yahoo.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.)

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
Watched videos and learned on my own	Self, Other staff
No training-just jumped in	Other staff

Q7: In retrospect, what additional training would have been useful?

Training on how to set up an effective makerspace (space, content, etc.). Also training and advice for developing partnerships to support making.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,
If yes, where is the space located?. If no, where do your making activities take place?
The space is in our Teen Room.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Kings Store has given us a small donation for supplies.
-----------	---

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00

Q13: Where did the initial funding for making come from?

Library budget,
Other (please specify)
Supplies given as part of the Make It at the Library program.

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful program was a Brush Bot party. Community members of all ages were encouraged to attend. We used kits purchased from Makershed and promoted the program on our website, by word of mouth, and through social media. Several participants asked for additional family programs, and everyone we asked said they enjoyed the process and playing with the bots.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs ,
 - Provide more afterschool activities ,
 - Get more teens involved in library programs ,
 - Increase community participation in library programs ,
 - Attract different populations to library programs
-

Q16: Have you make progress toward your goals?

We are slowly starting to attract attention to our maker program, and have received positive feedback about the activities we have done. Progress has been slow in the beginning, but we are gaining momentum in building the program.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

It's more difficult to get an effective makerspace established without strong partnerships and specific goals in place. Planning ahead of time is very important.

#24



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, June 03, 2015 3:30:50 PM
Last Modified: Wednesday, June 03, 2015 3:55:07 PM
Time Spent: 00:24:17
IP Address: 216.14.248.18

PAGE 1

Q1: Contact information

Library	Drummond School & Community Library
Contact name	Jodi Oberweiser
Contact email	librarydhs@blackfoot.net
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Sure!

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify) Cricut TM, (Die Cut Machine)

Q3: Which materials attract the largest number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify)
I just purchased a Snap Circuit Kit and a MakeyMakey kit.

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

No training-just jumped in

Self

Other (please specify)

I did have some brief training from MSL when I borrowed the STEAM trunk and participated in the MakerSpace Pilot Project; but for most projects, I have just "jumped in".

Q7: In retrospect, what additional training would have been useful?

Additional training would have helped with my comfort level - but in the end, the participants were willing to test things out - and someone in the group always seemed to have a little experience with which ever machine we were using - so I mainly facilitated the program.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables,

Other (please specify)

Our library has access to the other components but the tables are the most basic item in the space we have.

Q10: When is the space available for making activities?

Whenever the library is open, Special hours,

By appointment

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Classroom Teachers

Partner 2

local individuals with specialized skill

Partner 3

Volunteers

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$0-\$1,000.00

Making at the Library

Q13: Where did the initial funding for making come from?

Library budget, Grant, Material donations,
Other (please specify)
Because we are a School & Community Library, I have been able to participate in an enrichment program through the school called 21st Century learning. They encourage partnerships and provide some funding for materials.

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

One of our most successful making program was a partnership with a neighboring 2-room grade school to participate in the Montana State Library's MakerSpace Trunk Pilot. Parents and teachers helped 36 students in "centers" throughout the library. During their visit, the students made buttons, used a sewing machine, Snap Circuits, Brick (Lego-type) activities, and Squishy circuits.

Another successful program was Spindle Spinning. A volunteer demonstrated how to spin wool using a dowel and a CD! The kids loved it and it turned into 3 more classes.

While the program using Cricut Die Cuts was not as well attended, it was a program that seemed to be well-liked.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Increase community participation in library programs ,
Attract different populations to library programs

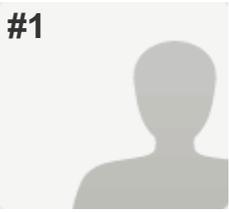
Q16: Have you make progress toward your goals?

I believe that the events are becoming more popular and local patrons and students are visiting the library to participate in Maker events.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#1



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, May 20, 2015 11:59:34 AM
Last Modified: Wednesday, May 20, 2015 12:17:01 PM
Time Spent: 00:17:27
IP Address: 12.17.167.146

PAGE 1

Q1: Contact information

Library	East Bonner County Library District
Contact name	Morgan Gariepy
Contact email	morgan@ebonnerlibrary.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes.

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine, loom, knitting, etc.)
,
3D printers,
Other (please specify)
Fischertechnik robots and Legos

Q3: Which materials attract the largest number of users?

Other (please specify)
Fischertechnik robots and Legos

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey)

Q5: What tools/materials do you wish you had?

Computer programming (Arduino, Raspberry Pi, Makey Makey)

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Had a mentor	Self
Other (please specify)	I inherited a successful program when I took the job. I learned from the volunteers so I could keep it running.

Q7: In retrospect, what additional training would have been useful?

More time with Arduinos and 3D printing.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	No
Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.	Tables, Computers
Q10: When is the space available for making activities?	Only when formal programming is taking place

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	A local maker space co-op hosted a Teen Tech Week program on acrylic sign design
Partner 2	A local teacher who teaches 3D design in her classroom led a workshop on 123D Sculpt+ for Teen Tech Week

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$1,000-\$5000.00, Please explain This would cover the costs of an inexpensive 3D printer; several Arduino sets; a few other kits such as MaKey MaKeys, Squishy Circuits, Circuit Blocks, or Snap Circuits; and possibly allow for some staff training or guide books.
Q13: Where did the initial funding for making come from?	Grant, Material donations

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful making program is our weekly Make It at the Library program. It is aimed at students age 5-12. We offer Fischertechnik robots, Arduinos, embroidery and quilting, and Legos. Other activities are also offered on an ad hoc basis.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs

Q16: Have you make progress toward your goals?

I have managed to provide a variety of STEM-related programs to the kids in our library, but I have been completely unsuccessful in attracting teens. This is largely due to the fact that the teens do not want to be in a program with 6 year olds and that they are interested in more complex making than I can offer with my existing younger makers. I would like to offer a separate teen maker program.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#41



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, June 23, 2015 3:44:22 PM
Last Modified: Tuesday, June 23, 2015 3:53:50 PM
Time Spent: 00:09:28
IP Address: 208.46.237.35

PAGE 1

Q1: Contact information

Library

East Bonner County Library District

Contact name

Morgan Gariepy

Contact email

morgan@ebonnerlibrary.org

Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.

morgan@ebonnerlibrary.org

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),

Computer programming (Arduino, Raspberry Pi, Makey Makey))

,

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

,

3D printers,

Other (please specify)

Fischertechnik robots and Legos

Q3: Which materials attract the largest number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

,

Other (please specify) Fischertechnik and Legos

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

Respondent skipped this question

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Watched videos and learned on my own	Self
Had a mentor	Self
No training-just jumped in	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

More formal training.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	No
Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.	Tables, Computers
Q10: When is the space available for making activities?	Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Dinah Gaddie, 5th grade teacher: led a workshop on 3D design for Teen Tech Week
Partner 2	MakerPoint Studios: Led a workshop on Illustrator and laser cutters for Teen Tech Week

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$0-\$1,000.00, Please explain A large amount of our tools and supplies were provided by ICfL, so we had significantly lower costs than is really necessary.
Q13: Where did the initial funding for making come from?	Library budget, Grant

PAGE 7: PROGRAMMING

Making at the Library

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful Making program was our Teen Tech Week workshop on 3D design using 123D Sculpt+. We reached 100% capacity at both our branches.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs

Q16: Have you make progress toward your goals?

We have been very successful at attracting younger makers (grades K-5); however, the teens have been much harder to attract.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#29



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Monday, June 15, 2015 1:01:39 PM
Last Modified: Monday, June 15, 2015 1:34:55 PM
Time Spent: 00:33:15
IP Address: 97.121.46.19

PAGE 1

Q1: Contact information

Library	Gooding Public Library
Contact name	Cindy Bigler
Contact email	goodingpubliclibrary@gmail.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
3D printers

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q5: What tools/materials do you wish you had?

Respondent skipped this question

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Other staff
No training-just jumped in	Self

Q7: In retrospect, what additional training would have been useful?

I wish I would have had training on arduino, raspberry pi, micro controllers and open source hardware and software to use these. We have a CNC milling machine that we have found very hard to use and I wish we would have had training on it.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?

The space is located in the back corner of our one room library.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Gooding School District they plan and workout programs with us. We look for needs of the students and work to meet both their needs and desires to program.
Partner 2	Gooding County 4-H program- man power to run programs.
Partner 3	Gooding Rotary club has helped with money to buy items and manpower.
Partner 4	ICFL- materials, training and people with skills and knowledge to share concerns and ideas with.
Partner 5	Google maker camp

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables. \$1,000-\$5000.00

Q13: Where did the initial funding for making come from? Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We have had more than one successful program. 3D printing is always successful. We have an audience age level from 8 years old to adult and an average attendance of 5 to 25 depending on the day. Materials used are the 3D printer, filament, and computers. We have participants set up a Tinkercad account and plan and design a print. We then print off their design. Troubleshooting and learning as we go. We have partnered with schools and a local 4-H group. We promote through our website, flyers, Facebook, and word of mouth. Participant feedback has been positive and they are excited to see their design get printed. The only negative feedback we have received is that of not having more printers.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

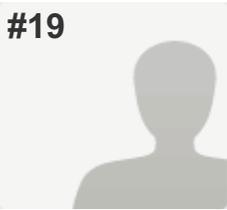
Q16: Have you make progress toward your goals?

We have been pretty successful in progressing towards these goals. We are providing more STEM activities in the library these activities are attended by many ages and are geared to many ages. We have some programs that pull in more teens than other programs. Our group of tweens has increased. We are building good foundations with our programs and we have seen an increase in attendance by many ages including adults and teens as well as younger children and tweens.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Start small and do it. Watch tutorials online, experiment and get your hands dirty. Try everything first that will help ease fears and don't be afraid to make mistakes.

#19



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, May 22, 2015 10:48:35 AM
Last Modified: Friday, May 22, 2015 11:06:22 AM
Time Spent: 00:17:47
IP Address: 69.146.31.130

PAGE 1

Q1: Contact information

Library	Helena High School
Contact name	Kate Peterson
Contact email	kpeterson@hsd1.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	kpeterson@hsd1.org

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify)
3D printing has been going on in other parts of the building but we haven't used it in our Makerspace (yet!)

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify)
They are all popular. The kids seem to jump from one thing to the next. The Arduino and Raspberry Pi are definitely for more sophisticated coders but we have had couple of kids try it.

Making at the Library

Q4: Which materials attract the least number of users?

Respondent skipped this question

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

,

Other (please specify)

We really haven't done much with the sewing machine and LED textiles. I hope we will be able to experiment more with that soon.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Watched videos and learned on my own

Self, Other staff

Other (please specify)

We just tried to find out as much as we could from articles and videos. Then, we attended the Webinar put on by the MT State library and that really helped us figure out what a Makerspace could be all about.

Q7: In retrospect, what additional training would have been useful?

I would have really like to go visit another Makerspace in MT. I know there are several around the state and it seems like the easiest way to learn and understand is to actually watch it in action.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
Right now, we have just taken over a few tables and shelves in our library. In the future, we may look to use a space that is currently being used in another way.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers

Q10: When is the space available for making activities?

Special hours,

Only when formal programming is taking plan ,

Other (please specify)

Currently, we have just been hosting Open Houses after school for both HHS students and HMS students. We would like it to be more open if we create a more permanent space in the future.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Cara Orban, MT State library
Partner 2	Amy Friez, HHS/HMS librarian
Partner 3	Bill Kaiser, HHS/CHS Technology Specialist
Partner 4	Joanne Didriksen, HHS librarian

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain
We have begun to price out the components included in the kit we borrowed from the MT State Library and if we add the 3D printer equipment, we would probably be looking at \$4-5000

Q13: Where did the initial funding for making come from?

Library budget,

Other (please specify)
If we create a more permanent Makerspace, we will apply for grants and rely on the technology budget from our building (if we can convince our Administrators to spend some if on this!)

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

So far, we have had a really good experience partnering with a HHS science teacher and a HMS science teacher to bring kids in after school for an Open House setting. The students jumped right in and had a fun time and the educators who participated really learned a lot from how the students interacted with the different components of the kit.

PAGE 8: Evaluation

Making at the Library

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs ,
Other (please specify)
All of the above and also to make sure that we are evolving from a traditional library to a innovative, 21st Century Library Media center.

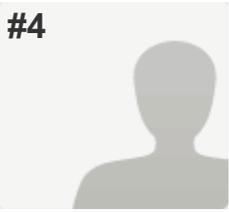
Q16: Have you make progress toward your goals?

The Makerkit that we borrowed from the MT State Library was the first great step towards creating our own, more permanent space. We are excited about the possibilities.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Educate yourself as much as you can, think about as many possibilities as you can but then just dive in. I think we learn how to adjust this programming as we see how the students/teachers use it. We have a long way to go in figuring it all out but I think we are on the right track.

#4



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Wednesday, May 20, 2015 1:26:58 PM
Last Modified: Wednesday, May 20, 2015 1:39:56 PM
Time Spent: 00:12:58
IP Address: 216.222.120.143

PAGE 1

Q1: Contact information

Library	Heritage Middle School
Contact name	Amy Armstrong
Contact email	armstrong.amy@westada.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey)
 ,
 3D printers,
 Other (please specify) Knex kits

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.)

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q5: What tools/materials do you wish you had?

Other (please specify)
 I wish I had more of what I already have (circuits, computer programming). I don't have a lot of textiles and fiber arts and would like more.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
No training-just jumped in	Self, Other staff

Making at the Library

Q7: In retrospect, what additional training would have been useful?

I started out on my own, so I wish I would have had more training on what resources to buy and easy projects to work on so it wasn't as overwhelming.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?

Back of the library

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers,

Other (please specify) Shelving

Q10: When is the space available for making activities?

Whenever the library is open,

Only when formal programming is taking place,

Other (please specify)

Part of it is open all of the time and some resources are brought out for formal programming.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Idaho Library Commission: Provided training and materials

Partner 2

Meridian Public Library: Provided training and help, mentored me

Partner 3

Parent volunteers: helped out with maker nights

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain

It takes quite a lot to start out, with organization, shelving. The resources themselves can get spendy. I found for around \$3000 I was able to get a nice solid start and have lots of options to choose from.

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Teen tech week was our most popular making program. The brush bot races were by far the most popular thing we did because lots of kids got to participate and keep it afterwards. All week long we did activities but this was the stand out. It was for grades 6-8. Kids said "This is the most fun I have had in the library!"

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

I think slowly but surely we are. The kids who come to maker night are not my readers. I would like to see more girls come.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#36



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 19, 2015 2:02:04 PM
Last Modified: Friday, June 19, 2015 2:19:27 PM
Time Spent: 00:17:22
IP Address: 173.198.179.195

PAGE 1

Q1: Contact information

Library	Island Park Library
Contact name	Randa Dye
Contact email	iplibrary1@gmail.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
Other (please specify)
We have made lots of things with paper. Things like origami, Fashion Designing, Zentangle, paper airplanes and Helicopters. Because of low budget and very small space.

Q3: Which materials attract the largest number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q4: Which materials attract the least number of users?

Respondent skipped this question

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
3D printers

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
Learned from attending other maker activities	Self
Watched videos and learned on my own	Self

Q7: In retrospect, what additional training would have been useful?

all of it was useful.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
I put things out on a card table.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	none
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PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain
You can start with small project, then add new stuff as you can afford it. any way that is how we are doing it. but we are probably the smallest library in the state of Idaho.

Q13: Where did the initial funding for making come from?

Library budget, Material donations

PAGE 7: PROGRAMMING

Making at the Library

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Paper airplanes and the helicopters, got the most so far, though the knitting group has grown quite a lot too. We have adult and kids that participate in the knitting group.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Increase community participation in library programs

Q16: Have you make progress toward your goals?

yes

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

we started out slow, but now the kids and even some adults are coming in to do just the maker space. It doesn't have to be elaborate, to be exciting for the public.

#31



INCOMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Thursday, May 21, 2015 12:52:13 PM
Last Modified: Thursday, June 18, 2015 3:34:13 PM
Time Spent: Over a week
IP Address: 216.83.79.59

PAGE 1

Q1: Contact information

Library	Jerome Public Library
Contact name	Linda Mecham
Contact email	lmecham@ci.jerome.id.us
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey),
 ,
 3D printers

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey)

Q4: Which materials attract the least number of users?

3D printers

Q5: What tools/materials do you wish you had?

Respondent skipped this question

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Watched videos and learned on my own	Self, Other staff

Making at the Library

Q7: In retrospect, what additional training would have been useful?

I am well pleased with the training we received.

The only suggestion I have might be to have like a video presentation of Maker activities from 1st or 2nd round libraries. The range of activities should be from the very simple to the more complex. Seeing posts on Facebook is great, but watching the activities as they play out might be really useful. There is the component of how to encourage exploration and collaboration in addition to the actual activity. It would be great to see the interactions of others with their Makers.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Only when formal programming is taking plan ,
Other (please specify)
We host a Make It program every Monday. However, during Spring Break and Christmas Break, we set up stealth activities.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Friends of the Library - Provide financial support for Make It supplies.

Partner 2

Franklin Building Supply - They have donated many building supplies, i.e. lumber, screws and nails, etc.

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Making at the Library

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Respondent skipped this question

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Respondent skipped this question

Q16: Have you make progress toward your goals?

Respondent skipped this question

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#33



INCOMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 19, 2015 9:12:09 AM
Last Modified: Friday, June 19, 2015 9:14:22 AM
Time Spent: 00:02:13
IP Address: 206.127.78.65

PAGE 1

Q1: Contact information

Library	Lewis & Clark Library
Contact name	Heather Dickerson
Contact email	hdickerson@lclibrary.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Sure

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Learned from attending other maker activities	Self
Watched videos and learned on my own	Self
No training-just jumped in	Self

Q7: In retrospect, what additional training would have been useful?

More circuit training for me. And ways to incorporate items into the existing spaces in the library. It was just challenging to carve out time.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Computers,
Other (please specify) n/a

Q10: When is the space available for making activities?

Only when formal programming is taking place ,
Other (please specify) n/a

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	MLA
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PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

Respondent skipped this question

Q13: Where did the initial funding for making come from?

Respondent skipped this question

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Respondent skipped this question

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Respondent skipped this question

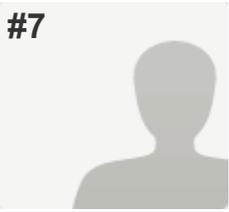
Q16: Have you make progress toward your goals?

Respondent skipped this question

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#7



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, May 20, 2015 4:49:15 PM
Last Modified: Wednesday, May 20, 2015 5:08:02 PM
Time Spent: 00:18:47
IP Address: 184.155.138.189

PAGE 1

Q1: Contact information

Library	Marshall Public Library
Contact name	Jamie Bair
Contact email	jbair@marshallpl.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
Other (please specify)
Hands-on, approachable, easy-to-understand have been the most successful items. Circuit blocks are by far the easiest item to get kids to play with.

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Other (please specify)
Arduinos are fun if you have a captive audience (we took them into a classroom and the kids all enjoyed it). However, attendance at voluntary Arduino programs have been hit-or-miss. We will continue to work with them this summer and see if we can't get more interest. We are trying to think of new ways to demonstrate how learning Arduino can be applied in different ways and how easy the process really is.

Making at the Library

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine, loom, knitting, etc.)

,

3D printers,

Other (please specify)

I want to say that I wish we had more plug-and-play type equipment (similar to circuit blocks) just because children seem to understand them quickly, but I feel like children get more satisfaction after learning a more challenging process, like wiring an Arduino. It's much more difficult to get them to try the Arduino.

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training

Self, Other staff

Watched videos and learned on my own

Self

Q7: In retrospect, what additional training would have been useful?

We received our supplies in a kit from Make It Idaho. Sorting the supplies into usable components was a bit challenging once we got back to our library. We received a lot of great supplies from Make It Idaho, but struggled to find projects that used the resources we had, so we ended up buying a lot of additional supplies right off the bat. I guess more ideas for using the supplies we had would have been helpful.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?

We have a retrofitted RV, but the space is too small to fit more than 12 people at a time, and most of our projects have been in schools or the library. We hope to have the bus up and running this summer and want to take it to schools in the fall.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers,

Other (please specify)

access to electricity, power strips, chairs,

Q10: When is the space available for making activities?

Only when formal programming is taking place ,

Other (please specify)

This is a short-coming of our mobile makerspace idea. I would love to offer open-hours for exploration, but have not figured out how to accomplish this yet.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Kath Ann Hendricks

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain
There has been quite the learning curve to learn the technology and figure out ways to implement the technology into meaningful programming. We received a grant, but have had to buy a lot of extra supplies to get going on projects. Our Friends donated \$1000 to help us furnish our mobile makerspace as well.

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We have had a lot of success taking circuit blocks to a local park during an environmental fair as well as leaving them out at the library.

I feel our most successful program to date has been partnering with a local charter school to guide a class of 8th grade students through the process of wiring and coding an Arduino. We used 6 Arduinos, breadboards, RGB LEDs, and push button switches to make the "magic lightbulb" project from a Make book on getting started with Arduino. We took several USB cords and adapters to plug the Arduinos into outlets once the code was uploaded. We had several laptops, but kept having troubles with the laptops not recognizing when the Arduinos were plugged in, so we ended up loading code onto the Arduinos from my MacBook Pro.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Increase community participation in library programs ,
Attract different populations to library programs ,
Other (please specify)
Take technology into the community, increase public library visibility in the community

Q16: Have you make progress toward your goals?

My vision for this program is to take monthly makerspace projects into classrooms. Our Arduino program this spring was a great experiment to see what does and does not work. This summer we will be practicing with our maker but in the community. My hope is next fall we will be able to make more strides in getting programming to students in their schools.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

You can't be an expert in everything, but you have to be willing to explore and think outside the box if you are going to make makerspaces fun for your community.

#25



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, June 03, 2015 4:33:55 PM
Last Modified: Wednesday, June 03, 2015 4:40:27 PM
Time Spent: 00:06:31
IP Address: 74.43.112.4

PAGE 1

Q1: Contact information

Library	McCall Public Library
Contact name	Meg
Contact email	mlojek@mccall.id.us
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	No, thanks--

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Circuits (Squishy circuits, etc.), Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q3: Which materials attract the largest number of users?	Circuits (Squishy circuits, etc.)
Q4: Which materials attract the least number of users?	<i>Respondent skipped this question</i>
Q5: What tools/materials do you wish you had?	3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Watched videos and learned on my own	Self, Other staff
Had a mentor	Other staff
No training-just jumped in	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

I'm not sure, we haven't done much.

PAGE 4: SPACE

Making at the Library

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers

Q10: When is the space available for making activities?

Whenever the library is open, Special hours,
By appointment

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

community volunteers

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00

Q13: Where did the initial funding for making come from?

Library budget, Gift funds

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Soldering with teens, run by a volunteer. Kids loved it. Promotion was through regular venues: newspaper, online and schools and also word of mouth.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Making at the Library

Q16: Have you make progress toward your goals?

Yes but we are so dependent on volunteers that we haven't had a consistent Maker program

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Thank you--

#44



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, May 26, 2015 2:35:35 PM
Last Modified: Friday, July 31, 2015 5:18:02 PM
Time Spent: Over a month
IP Address: 74.202.214.74

PAGE 1

Q1: Contact information

Library	Meridian Library District-Main Branch
Contact name	Megan Egbert
Contact email	megan@mld.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
3D printers

Q4: Which materials attract the least number of users?

Respondent skipped this question

Q5: What tools/materials do you wish you had?

Respondent skipped this question

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

More training on 3D Design, Raspberry Pi, Arduinos, and the maker movement in general

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	No
Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.	Sink, Tables, Computers, Projector, Screen
Q10: When is the space available for making activities?	Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Local 3D printing experts- have done presentations and helped with programs
Partner 2	Open Lab Idaho- Training on Arduinos
Partner 3	Local Movie Makers- programs on digital film
Partner 4	Local Musicians- programs on music mixing

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$1,000-\$5000.00
Q13: Where did the initial funding for making come from?	Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

I guess that would depend on what is success. We have done some great 3D printing challenges where we have had wide, school wide participation. We visited the school and taught them the basics of Tinkercad, then the school media center allowed them to use class visits working on the projects. We specified how big objects could be and the judging criteria, then had a winning entry for various age groups. Audience level: 1st-5th grade.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs ,
 - Provide more afterschool activities ,
 - Get more teens involved in library programs ,
 - Increase community participation in library programs ,
 - Attract different populations to library programs
-

Q16: Have you make progress toward your goals?

Yes, all of them.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

I would start with staff awareness and training.

#26



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, June 04, 2015 11:33:48 AM
Last Modified: Thursday, June 04, 2015 11:40:09 AM
Time Spent: 00:06:21
IP Address: 74.202.214.74

PAGE 1

Q1: Contact information

Library	Meridian Library Silverstone
Contact name	Travis Porter
Contact email	travis@mld.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
3D printers,
Other (please specify)
Some robotics though want to expand

Q3: Which materials attract the largest number of users?

3D printers

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey)

Q5: What tools/materials do you wish you had?

Computer programming (Arduino, Raspberry Pi, Makey Makey),
,
Other (please specify)
For programming, I think it's harder to find people and time to devote to learning and being comfortable teaching. I am looking for partners to help us.

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self
Watched videos and learned on my own	Other staff
No training-just jumped in	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

I didn't attend, or haven't attended, in a bit but would like some more practical training in how to better get kids into coding.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Computers

Q10: When is the space available for making activities?

Special hours,
Only when formal programming is taking place

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	At the Branch, we haven't really had any formal partnerships
-----------	--

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000,
Please explain
We need laptops, I'm working on a grant and to hopefully get them into our budget for next year.

Q13: Where did the initial funding for making come from?

Library budget, Grant

PAGE 7: PROGRAMMING

Making at the Library

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Teen maker day with 3d printers, makey-makey, and Oculus Rift from the Cherry Lane location.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Somewhat. We are new into adding these types of programs.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#5



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Wednesday, May 20, 2015 1:47:08 PM
Last Modified: Wednesday, May 20, 2015 2:05:20 PM
Time Spent: 00:18:12
IP Address: 216.14.254.94

PAGE 1

Q1: Contact information

Library	Missoula Public Library
Contact name	Rebecca Rice
Contact email	rrice@missoula.lib.mt.us
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey))
 ,
 Textiles/fiber arts (sewing machine. loom, knitting, etc.)
 ,
 3D printers,
 Other (please specify) soap making

Q3: Which materials attract the largest number of users?

3D printers

Q4: Which materials attract the least number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

Q5: What tools/materials do you wish you had?

Other (please specify) CNC machine

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Watched videos and learned on my own	Self
--------------------------------------	------

Making at the Library

Q7: In retrospect, what additional training would have been useful?

A review course on basic electronics.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?

The space that is used at the Makerspace was formerly the small meeting room at the library.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector

Q10: When is the space available for making activities?

Special hours, By appointment

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

SpectrUM - have supported our space with interested individuals

Partner 2

Washington Companies - helped fund the Makerspace's Technovation Challenge team

Partner 3

University of Montana Missoula - provided after school students and volunteers

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000,

Please explain
\$5,000 - 10,000 would be sufficient in resources for the Makerspace for 3D printing and supplies for replacement parts, and for take away items for visitors.

Q13: Where did the initial funding for making come from?

Library budget

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

My most successful program would be the DIY Vegan Soap Making. The program was aimed towards adults and required a sign up sheet online in order to attend the class, all 8 slots were filled. The materials that were used were lye, water, essential oils, and fats. There was promotion through local the local paper and on the library's website. Participant feedback was not taken for the pilot class but will be gathered during the second class.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs ,
 - Provide more afterschool activities ,
 - Get more teens involved in library programs ,
 - Increase community participation in library programs ,
 - Attract different populations to library programs
-

Q16: Have you make progress toward your goals?

Yes the Missoula Public Library has made progress towards the goals of providing more STEM-related programs, providing more afterschool activities, getting more teens involved in the library programs, increasing community participation in library programs, and attracting different populations to library programs.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

The community that you are serving should guide the programming that is provided.

#23



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, June 01, 2015 12:54:04 PM
Last Modified: Monday, June 01, 2015 4:47:19 PM
Time Spent: 03:53:14
IP Address: 24.117.22.2

PAGE 1

Q1: Contact information

Library	North Bingham County District Library
Contact name	Kaylene Christensen
Contact email	webnbcdl@cableone.net
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	webnbcdl@cableone.net

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey))
 ,
 Other (please specify) cubelets

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
 Other (please specify) cubelets

Q4: Which materials attract the least number of users?

Respondent skipped this question

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
 ,
 3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff

Making at the Library

Q7: In retrospect, what additional training would have been useful?

computer programing

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Shelley Kiwanas Club helped us by Raspberry Pis

Partner 2

Aaron Andrews taught soldering

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00

Q13: Where did the initial funding for making come from?

Library budget, Grant, Material donations

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our teens love the take apart activities and then they made SteamPunk Art out of the pieces

PAGE 8: Evaluation

Making at the Library

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

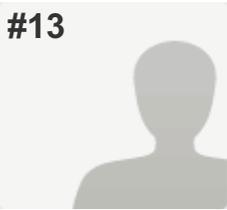
Q16: Have you make progress toward your goals?

Respondent skipped this question

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#13



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Thursday, May 21, 2015 1:14:21 PM
Last Modified: Thursday, May 21, 2015 2:32:11 PM
Time Spent: 01:17:50
IP Address: 162.218.180.90

PAGE 1

Q1: Contact information

Library	Post Falls High School
Contact name	Sue McLauchlin
Contact email	smclaunchlin@sd273.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q3: Which materials attract the largest number of users?	Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q4: Which materials attract the least number of users?	Other (please specify) We offered jewelry, paper bowls, journal of school year and make your own fabric into a bag (all no cost involved).No students were interested in any other type of project.
Q5: What tools/materials do you wish you had?	<i>Respondent skipped this question</i>

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Watched videos and learned on my own	Self, Other staff
No training-just jumped in	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

??? Circuits

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?
We used our conference room during the four week testing block.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables,

Other (please specify)
Just a counter, table and chairs. Set up two irons and 6 sewing machines. Also had a cutting station.

Q10: When is the space available for making activities?

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Library Assistant, Melisa Thompson

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$0-\$1,000.00,

Please explain
We no longer have a Family and Consumer class, so the sewing machines from that class were put to use. They also had two irons.

Q13: Where did the initial funding for making come from?

Material donations,

Other (please specify)
The project didn't involve any money. Students brought plastic showing bag that we fused. I used a pattern I found on the internet and we already had the machines and iron. We also made paper bracelets, necklaces and bowls that didn't involve any money.

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Since we haven't had a sewing class at our high school, both girls and boys jumped at the opportunity to make something with a sewing machine. There was no cost involved because we used plastic bags. The students loved it and were very excited about the finished project.

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Get more teens involved in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#37



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 19, 2015 2:53:24 PM
Last Modified: Friday, June 19, 2015 3:20:17 PM
Time Spent: 00:26:52
IP Address: 72.36.17.197

PAGE 1

Q1: Contact information

Library	Rosebud County Library
Contact name	Heather Johnstone
Contact email	rosebuddirector@gmail.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	no thank you

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Circuits (Squishy circuits, etc.), Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q3: Which materials attract the largest number of users?	Circuits (Squishy circuits, etc.)
Q4: Which materials attract the least number of users?	<i>Respondent skipped this question</i>
Q5: What tools/materials do you wish you had?	Computer programming (Arduino, Raspberry Pi, Makey Makey) , Other (please specify) more staff

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self
No training-just jumped in	Other staff

Q7: In retrospect, what additional training would have been useful?

day long training on technology parts of kit

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	No
Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.	Tables
Q10: When is the space available for making activities?	Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.	
Partner 1	various volunteers

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$0-\$1,000.00
Q13: Where did the initial funding for making come from?	Material donations

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

The kids liked the fingerprint activities. We only had a handful in attendance and the program was run by a volunteer.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.	Provide more STEM-related programs , Provide more afterschool activities
Q16: Have you make progress toward your goals?	<i>Respondent skipped this question</i>
Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.	<i>Respondent skipped this question</i>

#6



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, May 20, 2015 1:39:34 PM
Last Modified: Wednesday, May 20, 2015 2:37:14 PM
Time Spent: 00:57:39
IP Address: 72.24.106.16

PAGE 1

Q1: Contact information

Library	Shoshone Public Library
Contact name	Clay Ritter
Contact email	critter@shoshonecity.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey)
 ,
 Other (please specify) Basic wiring, legos. K'nex.

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.)

Q4: Which materials attract the least number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey)

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.), 3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Other staff

Making at the Library

Q7: In retrospect, what additional training would have been useful?

Honestly it is a time issue as with all things. It is not that the training is not good. It is the time that we lack for having additional training. Learning about these things could be a full time job. Some people need the basics. Some just want to jump right in. I think that without more days of training involved the current training we have had is the best possible.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?
Our making activities currently take place at the front of the Library and in the childrens area. With the turnout we have had we can use up all of the Library space available easily. We are working on a renovation to have a dedicated space in the back.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables

Q10: When is the space available for making activities?

Whenever the library is open

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Idaho Commission for Libraries- Providing the Make It At the Library grant.

Partner 2

Lincoln County Library Foundation- Has made donations for materials to help in our Maker Space.

Partner 3

Shoshone School Library- Is the advertising arm of everything we do. They are wonderful at spreading the word for us.

PAGE 6: BUDGET

Making at the Library

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000,

Please explain

This number is because with the grant already in place we estimate we are receiving close to \$5000 in support already if you factor time and training. Our space is not easily renovated so to do a proper job at creating a dedicated space (something I consider needful if you want to do basic making). Plus materials costs it would most likely be another 2-3000 total to have everything needed.

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful Making program was our Family Take Apart Night at the Library in April. We had 48 people age range from 2-63 in the Library pulling apart computers and other electronics. At one point we had a group out on the sidewalk in from of the library hammerin on a computer case. It was just pure fun.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more afterschool activities ,

Get more teens involved in library programs ,

Increase community participation in library programs ,

Attract different populations to library programs

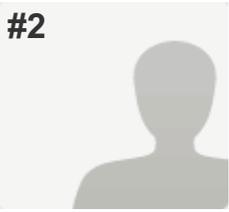
Q16: Have you make progress toward your goals?

Slowly but surely. For our Family Take Apart program we had a family attend from a different town who didn't even have a Library card. It was great.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

This is something you have to be prepared to devote time to. The more time you put into it the more you will get out of it.

#2



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Wednesday, May 20, 2015 12:32:07 PM
Last Modified: Wednesday, May 20, 2015 1:01:35 PM
Time Spent: 00:29:28
IP Address: 96.5.169.254

PAGE 1

Q1: Contact information

Library	Snake River School Community Library
Contact name	Kim Jones
Contact email	Kjones@snakeriver.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify)
Vinyl Cutter, Acuquilt Fabric Die Cut machine

Q3: Which materials attract the largest number of users?

3D printers,
Other (please specify) Vinyl Cutter, Fabric Die Cutter

Q4: Which materials attract the least number of users?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))

Q5: What tools/materials do you wish you had?

Respondent skipped this question

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Watched videos and learned on my own	Self

Q7: In retrospect, what additional training would have been useful?

More time training with Raspberry Pi, Makey Makey.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
We have a designated space always set up for the 3D printer, 3D scanner and Vinyl Cutter, everything else is brought out as needed.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Whenever the library is open,

Other (please specify)

We use a pop up system and bring things out as they are needed.

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Premier/ AutoCad training
Partner 2	Crazy threads/ asisting with Vinyl cutter setup
Partner 3	Cody Marshall

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00,

Please explain Supplies, equipment,

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Our most successful program is the 3D printer, people have truly embraced its usefulness. The Accuquilt Die Cutting and Vinyl cutter are used regularly as well.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

In the past year we had monthly presentations during noon and several evening programs. We sent up a weather balloon and tracked its results.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#10



INCOMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, May 21, 2015 12:52:00 PM
Last Modified: Thursday, May 21, 2015 12:53:37 PM
Time Spent: 00:01:36
IP Address: 184.170.181.156

PAGE 1

Q1: Contact information

Library	Stanley Community Library
Contact name	Jane Somerville
Contact email	stanley.id.library@gmail.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Sure

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q3: Which materials attract the largest number of users?	Other (please specify) Food
Q4: Which materials attract the least number of users?	<i>Respondent skipped this question</i>
Q5: What tools/materials do you wish you had?	<i>Respondent skipped this question</i>

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.	<i>Respondent skipped this question</i>
Q7: In retrospect, what additional training would have been useful?	<i>Respondent skipped this question</i>

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	<i>Respondent skipped this question</i>
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Making at the Library

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Respondent skipped this question

Q10: When is the space available for making activities?

Respondent skipped this question

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Respondent skipped this question

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

Respondent skipped this question

Q13: Where did the initial funding for making come from?

Respondent skipped this question

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Respondent skipped this question

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Respondent skipped this question

Q16: Have you make progress toward your goals?

Respondent skipped this question

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#9



INCOMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, May 21, 2015 8:42:51 AM
Last Modified: Thursday, May 21, 2015 11:53:55 AM
Time Spent: 03:11:04
IP Address: 65.100.78.119

PAGE 1

Q1: Contact information

Library	Stillwater County Library
Contact name	Della Haverland
Contact email	slibrary@mtlib.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	sure

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making? *Respondent skipped this question*

Q3: Which materials attract the largest number of users? *Respondent skipped this question*

Q4: Which materials attract the least number of users? *Respondent skipped this question*

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.),
Computer programming (Arduino, Raspberry Pi, Makey Makey))
,
Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply. *Respondent skipped this question*

Q7: In retrospect, what additional training would have been useful? *Respondent skipped this question*

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Respondent skipped this question

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Respondent skipped this question

Q10: When is the space available for making activities?

Respondent skipped this question

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Respondent skipped this question

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

Respondent skipped this question

Q13: Where did the initial funding for making come from?

Respondent skipped this question

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Respondent skipped this question

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Respondent skipped this question

Q16: Have you make progress toward your goals?

Respondent skipped this question

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#18



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, May 22, 2015 9:02:48 AM
Last Modified: Friday, May 22, 2015 9:15:49 AM
Time Spent: 00:13:00
IP Address: 206.217.6.185

PAGE 1

Q1: Contact information

Library	Sweetwater County Library System
Contact name	Jason Grubb
Contact email	jgrubb@sweetwaterlibraries.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes to being contacted

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers

Q3: Which materials attract the largest number of users?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)
,
3D printers,
Other (please specify) Knitting

Q4: Which materials attract the least number of users?

3D printers,
Other (please specify)
But only because 3D printers are newer and knitting has an established patron base.

Q5: What tools/materials do you wish you had?

Computer programming (Arduino, Raspberry Pi, Makey Makey))

PAGE 3: TRAINING

Making at the Library

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Other staff
Learned from attending other maker activities	Other staff
Watched videos and learned on my own	Other staff

Q7: In retrospect, what additional training would have been useful?

Advanced 3D printer training before actually committing to 3D printing.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No,

If yes, where is the space located?. If no, where do your making activities take place?
Making activities are held in our meeting rooms. It is a shared space that is used for many purposes by the library and the community.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables

Q10: When is the space available for making activities?

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Middle School - they have shown an interested and assisted with the 3D printing
Partner 2	Community Fine Arts Center - they help with the knitting classes

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000

Q13: Where did the initial funding for making come from?

Library budget,
Other (please specify) Library Foundation

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

It is our on going knitting classes. We have a knitting group that regularly meets (no advertising required) as well as knitting instruction classes that are offered periodically. We advertise in the newspaper, on FB, in-house flyers and posters, radio ads for the classes. The Community Fine Arts Center is a partner agency with our knitting programs and knitting group. The director of the Community Fine Arts Center provides knitting instruction. Participants enjoy the classes and many class attendees join the knitting group.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

We are moving slowly.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Two things are needed: 1. Staff - as budgets have decreased so have staff. The maker movement is exciting and an interesting direction for libraries, but requires staff to execute. Libraries can be better prepared by rethinking how they operate allowing staff to work in different ways. 2. Training - training costs time and money. Rural communities often have less access to face-to-face training. Staff who do not learn as well with videos or written instructions are at a disadvantage. This can slow the implementation of maker opportunities at the library.

#14



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Thursday, May 21, 2015 2:40:48 PM
Last Modified: Thursday, May 21, 2015 3:09:24 PM
Time Spent: 00:28:36
IP Address: 66.193.131.57

PAGE 1

Q1: Contact information

Library	Timberline High School
Contact name	Tina Roehr
Contact email	tina.roehr@boiseschools.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Sure

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Textiles/fiber arts (sewing machine. loom, knitting, etc.)
 ,
 Other (please specify)
 Soldering, deconstruction activities

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
 Other (please specify)
 deconstruction labs and soldering

Q4: Which materials attract the least number of users?

Other (please specify)
 They are all about the same-- curiosity is the key

Q5: What tools/materials do you wish you had?

3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Learned from attending other maker activities	Self
Watched videos and learned on my own	Self

Making at the Library

Q7: In retrospect, what additional training would have been useful?

I am in the process of getting/using a 3D printer. It is VERY isolating since I do not know programming. It's been an interesting experience, but I wish I had a network of go-to folks that I could call and say "HELP!!!!!"

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
In a corner of the library. All art/craft project material is out for use. Electronic activities are set out during pre-announced and planned times.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Tables,

Other (please specify)
Shelves, powerstrips, containers, craft supplies, small tools (screw drivers, pliers, etc.)

Q10: When is the space available for making activities?

Whenever the library is open, Special hours

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Grant from Lowe's Toolbox

Partner 2

Equipment from ICfL

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$5,000-\$10,000,

Please explain
Depends on what you get. Squishy circuits at \$25/kit or littleBits at \$79/kit or 3D printer at \$500-5,000

Q13: Where did the initial funding for making come from?

Library budget, Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

So far it's been any activity with Teen Tech Week, especially the soldering robot badges. Deconstruction labs have been popular as well. I think the 3D printer will be successful if I can get the thing to work.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more STEM-related programs ,
Get more teens involved in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Just start small and have fun! Lots of seniors who are mechanical or creative enjoy sharing their expertise-- tap into those resources for maker spaces as well.

#30



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, June 18, 2015 2:29:12 PM
Last Modified: Thursday, June 18, 2015 2:39:14 PM
Time Spent: 00:10:02
IP Address: 216.83.74.3

PAGE 1

Q1: Contact information

Library	Twin Falls Public Library
Contact name	Adam Day
Contact email	aday@twinfallspubliclibrary.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	Yes

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey)
 ,
 3D printers

Q3: Which materials attract the largest number of users?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey)
 ,
 3D printers

Q4: Which materials attract the least number of users?

Other (please specify)
 Most of the programming we do attracts a regular number of users. We have any programs that haven't had as many participants however it hasn't been do to the type of program we were providing.

Q5: What tools/materials do you wish you had?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey)
 ,
 Textiles/fiber arts (sewing machine. loom, knitting, etc.)
 ,
 3D printers

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Watched videos and learned on my own	Other staff
Had a mentor	Other staff
No training-just jumped in	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

All of the materials the ICFL has provided to our Library has been coupled with great training sessions to get staff trained to a point they can provide programming with the materials. Any additional training is always welcome.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?	No
Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.	Tables, Computers, Projector, Screen
Q10: When is the space available for making activities?	Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1	Twin Falls School District
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PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.	\$0-\$1,000.00
Q13: Where did the initial funding for making come from?	Grant, Other (please specify) ICfL

PAGE 7: PROGRAMMING

Making at the Library

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

Generally an open session where we provide access to all Maker style materials. We've found good success with this type of program.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Respondent skipped this question

#42



COMPLETE

Collector: Web Link 1 ([Web Link](#))
Started: Friday, June 26, 2015 12:11:50 PM
Last Modified: Friday, June 26, 2015 12:56:41 PM
Time Spent: 00:44:51
IP Address: 216.83.74.3

PAGE 1

Q1: Contact information

Library	Twin Falls Public Library
Contact name	Amy Mortensen
Contact email	amortensen@twinfallspubliclibrary.org
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	maybe

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?

Circuits (Squishy circuits, etc.),
 Computer programming (Arduino, Raspberry Pi, Makey Makey),
 ,
 3D printers,
 Other (please specify) Brick lab, engineering kits

Q3: Which materials attract the largest number of users?

Computer programming (Arduino, Raspberry Pi, Makey Makey)

Q4: Which materials attract the least number of users?

Circuits (Squishy circuits, etc.)

Q5: What tools/materials do you wish you had?

Textiles/fiber arts (sewing machine. loom, knitting, etc.)

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Attended formal training	Self, Other staff
Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff
No training-just jumped in	Self

Q7: In retrospect, what additional training would have been useful?

I'm not sure right now.

PAGE 4: SPACE

Q8: Do you have a space used exclusively for making activities?

No

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Computers, Projector, Screen

Q10: When is the space available for making activities?

Special hours,

Only when formal programming is taking plan

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

TJ Adams- high school teacher

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00

Q13: Where did the initial funding for making come from?

Grant

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We played a game with a makey makey where the participants had to close the circuit. They had a race to see how many times they could increase their number and raced against each other. We had 8-10 participants.

PAGE 8: Evaluation

Making at the Library

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Get more teens involved in library programs ,
Increase community participation in library programs ,
Attract different populations to library programs

Q16: Have you make progress toward your goals?

Yes, we have new teens participating almost every session.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

NA

#11



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Thursday, May 21, 2015 1:35:06 PM
Last Modified: Thursday, May 21, 2015 1:53:40 PM
Time Spent: 00:18:34
IP Address: 72.36.21.232

PAGE 1

Q1: Contact information

Library	Washakie County Library System
Contact name	Karen Funk
Contact email	director@washakiecountylibrary.com
Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.	no

PAGE 2: MAKING MATERIALS

Q2: What types of machines and tools have you used in making?	Textiles/fiber arts (sewing machine. loom, knitting, etc.)
Q3: Which materials attract the largest number of users?	<i>Respondent skipped this question</i>
Q4: Which materials attract the least number of users?	<i>Respondent skipped this question</i>
Q5: What tools/materials do you wish you had?	<i>Respondent skipped this question</i>

PAGE 3: TRAINING

Q6: What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

Learned from attending other maker activities	Self, Other staff
Watched videos and learned on my own	Self, Other staff
Had a mentor	Self, Other staff

Q7: In retrospect, what additional training would have been useful?

Training on how to teach to a crowd would benefit my staff.

PAGE 4: SPACE

Making at the Library

Q8: Do you have a space used exclusively for making activities?

Yes,

If yes, where is the space located?. If no, where do your making activities take place?
It is a general all purpose meeting room.

Q9: What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink, Tables, Projector, Screen,
Other (please specify)
Refrigerator, stove, microwave, large popcorn machine.

Q10: When is the space available for making activities?

Whenever the library is open, By appointment

PAGE 5: PARTNERS

Q11: Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Friends of the Library, buying supplies

Partner 2

Local artists volunteering their time and skill

Partner 3

Local stores donating materials

PAGE 6: BUDGET

Q12: What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

\$1,000-\$5000.00

Q13: Where did the initial funding for making come from?

Library budget, Gift funds, Material donations

PAGE 7: PROGRAMMING

Q14: Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

We had a very successful event in needle felting. Wool felt and design was provided by a local artist and funded by our Friends group. Promotion was made through local newspapers, posters, website and facebook.

PAGE 8: Evaluation

Q15: What did you hope/expect to achieve through maker activities? Select as many as applicable.

Provide more afterschool activities ,
Get more teens involved in library programs ,
Increase community participation in library programs

Making at the Library

Q16: Have you make progress toward your goals?

It has remained the same. the "crafters" come to the presentations. Not many people trying something new.

Q17: Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.

Know your craft well.

Basic Making Tools Description and Price sheet

Circuits

Snap Circuits – ages 8 and up (Kits range from \$16.50 - \$200; 2-4 kids working on one)
<http://snapcircuits.net/>

1. What it is: Snap Circuits is a kit that helps young people to understand the practical applications of electronics. Makers will start out learning about circuit basics, and then build up to topics like transistors, integrated circuits, and how radios work. This kit is intended for grades 4-12, but younger children can also take part in some of the more simple projects.
2. How it works: Follow the directions to snap the pieces together to create working circuits.

Squishy Circuits – younger kids and up (\$25 per kit; 2-3 kids working on one)
<http://courseweb.stthomas.edu/apthomas/SquishyCircuits/index.htm>

1. What it is: Squishy Circuits was developed at the University of St. Thomas and it allows makers to create circuits and explore electronics using play dough.
2. How it works: Play dough insulates or conducts electricity safely to light up LEDs and sound off buzzers and whistles. Completely safe for young makers.

Soft Circuits

Adafruit LED Sewing Kit – teens and up (\$14.95 for the kit, though basic materials can be bought separately for less; 2 projects per kit) <http://www.adafruit.com/products/1285>

1. What it is:
 - a. Soft circuits, also known as electronic textiles (“e-textiles”), are electrical circuits created using flexible conductive materials (such as conductive threads and fabrics) in conjunction with discrete electronics components (such as lights, batteries, switches, and sensors).
2. How it works:

By sewing with conductive thread, you create a circuit within the insulating material.

Bricks

PCS Edventures BrickLab – young kids and up (\$549 for a gigantic box of 6,500 bricks plus lesson plans; dozen or more kids) <http://edventures-com.myshopify.com/collections/bricklab>

1. What it is: The Brick Lab is comprised of 6,600 bricks in 6 different colors and 8 different sizes (2x2 to 2x10), base plates, brick separator.

Comes with a set of 4 curriculum books filled with lesson plans that are written around STEAM concepts. (Specifically, Math, Physics, Construction Engineering, and Communication).

2. How it works: Follow curriculum to build projects correlating with concepts in physics, math, construction engineering, and communication skills. OR, use for open-ended play.

PCS Edventures Discover Engineering Kit – teens (\$429; 10 kids working on different projects)

<http://www.edventures.com/collections/discover/products/discover-engineering-kit?variant=1652668929>

What it is: This kit introduces engineering concepts through step by step hands on activities. Where the BrickLab can be open ended and allow for unlimited building possibilities, the engineering and the robotics kits are very detail oriented.

How it works: By following the color-coded instructions included for each project, makers will learn about key concepts in engineering, as well as how to follow instructions (building materials nomenclature and size; following a specific order) and communication skills, if makers are working with partners or in a group.

PCS Edventures Discover Robotics Kit - teens (\$349; a handful of kids)

<http://www.edventures.com/collections/discover/products/discover-robotics?variant=1603754817>

What it is: This kit is similar to the engineering kit, but with the added element of programming simple instructions for the robot.

How it works: The robotics kit includes software called the Cortex. It is a simple, colorful drag-and-drop programming software that instructs the computer part of the robot, called the Brain.

Programming

Arduino starter kit – teens and up (\$64.99 from Makershed; 1 or 2 makers per Arduino)

<https://www.arduino.cc/en/Main/ArduinoStarterKit>

What it is: An Arduino board is an 8-bit AVR microcontroller with complementary components that facilitate programming and incorporation into other circuits. The Arduino requires more time to learn than some other makerspace tools.

How it works: Makers can download open source Arduino software to code and instruct the Arduino to do any number of tasks, from simply blinking an LED light to more complex tasks such as programming a sensor that responds to environmental conditions.

MaKey MaKey - 8 & up (\$49.95; a handful of kids)

<http://shop.makeymakey.com/>

What it is: *MaKey MaKey* is a circuit board kit that can be used to connect objects with a computer, transforming those objects into computer keys or mouse clicks. With *MaKey MaKey*, bananas can become pianos, or Play-Doh can be shaped into Nintendo controllers. With these inventions, students learn about the fundamentals of circuits and computers.

How it works: Plug the MaKey MaKey into a computer with the USB cord, clip the alligator clips from the MaKey MaKey to any conductive material (pennies, bananas, aluminum foil, play dough, etc). Use the controller to interact with the computer in a way like never before!

3D Printing

A variety of 3D design software and printers exist. Some software is free. Printer prices vary depending on factors such as printer bed size, heated or non heated bed, and number of extruders. Before purchasing a 3D printer it is recommended you research the options thoroughly and talk with others using them. 3D printing is complex and requires patience. The site below provides good background information on the topic:

2015 Best 3D printers, reviews and comparisons: <http://3d-printers.toptenreviews.com/>

Making at the Library

Cara Orban at the Montana State Library and Sue Walker at the Idaho Commission for Libraries are presenting a break-out session at the Association of Rural and Small Libraries (ARSL) conference.

Titled "Making Makers in your Community Makes Sense", the purpose of this session is to share information from libraries that have incorporated making into their library programming and culture.

The session will focus on the following topics:

- Materials**
- Training**
- Space**
- Partnerships**
- Budget**
- Programs/outreach**
- Evaluation**

You are invited to share the knowledge you have gained from your making experiences. The following survey should take no more than 15 minutes to complete. Thank you for helping other libraries become making libraries!

Please complete by Friday, June 5.

*** 1. Contact information**

Library

Contact name

Contact email

Please indicate if you are willing to be contacted by email by participants for more information about your making experiences.

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MAKING MATERIALS

2. What types of machines and tools have you used in making?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)
- Textiles/fiber arts (sewing machine, loom, knitting, etc.)
- 3D printers

Other (please specify)

3. Which materials attract the largest number of users?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)
- Textiles/fiber arts (sewing machine, loom, knitting, etc.)
- 3D printers

Other (please specify)

4. Which materials attract the least number of users?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)
- Textiles/fiber arts (sewing machine, loom, knitting, etc.)
- 3D printers

Other (please specify)

5. What tools/materials do you wish you had?

- Circuits (Squishy circuits, etc.)
- Computer programming (Arduino, Raspberry Pi, Makey Makey)
- Textiles/fiber arts (sewing machine, loom, knitting, etc.)
- 3D printers

Other (please specify)

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TRAINING

* 6. What training did you undertake before planning your maker activities? How did other staff learn? Check as many as apply.

	Self	Other staff
Attended formal training	<input type="checkbox"/>	<input type="checkbox"/>
Learned from attending other maker activities	<input type="checkbox"/>	<input type="checkbox"/>
Watched videos and learned on my own	<input type="checkbox"/>	<input type="checkbox"/>
Had a mentor	<input type="checkbox"/>	<input type="checkbox"/>
No training-just jumped in	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

* 7. In retrospect, what additional training would have been useful?

SPACE

* 8. Do you have a space used exclusively for making activities?

Yes

No

If yes, where is the space located?. If no, where do your making activities take place?

* 9. What are the basic components of the space used for making? Please answer this question regarding the space used for making activities-even if it is not used exclusively for making.

Sink

Tables

Computers

Projector

Screen

Other (please specify)

* 10. When is the space available for making activities?

Whenever the library is open

Special hours

By appointment

Only when formal programming is taking plan

Other (please specify)

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PARTNERS

* 11. Please list partners (individuals, organizations, and volunteers) and how they have supported your making activities.

Partner 1

Partner 2

Partner 3

Partner 4

Partner 5

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BUDGET

* 12. What would you estimate as the cost to implement basic making in your library? This should include equipment, staff training, and consumables.

- \$0-\$1,000.00
- \$1,000-\$5000.00
- \$5,000-\$10,000
- More than \$10,000

Please explain

* 13. Where did the initial funding for making come from?

- Library budget
- Grant
- Gift funds
- Material donations

Other (please specify)

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PROGRAMMING

* 14. Please describe your most successful making program. Include audience level, materials used, any partners, promotion, and participant feedback.

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Evaluation

* 15. What did you hope/expect to achieve through maker activities? Select as many as applicable.

- Provide more STEM-related programs
- Provide more afterschool activities
- Get more teens involved in library programs
- Increase community participation in library programs
- Attract different populations to library programs

Other (please specify)

16. Have you make progress toward your goals?

17. Please share any other comments about making that you feel would help library staff be better prepared to begin making in their libraries.