

Welcome to KidsTeam!

A Guidebook

Version 2.0



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Who is KidsTeam?

At KidsTeam adults partner
with children to design new
technology **for** children

Welcome to KidsTeam UW! We are operated out of the University of Washington, and are led by Dr. Jason Yip. We are a group of researchers and students who are interested in what children want and need when it comes to children's programming and technology. We strive to create long-term partnerships between the adult and child members of our team, in the goal of creating a space where kids and adults can work together as equals to transform spaces and technology!

Instead of just utilizing the experience and knowledge of professional designers, KidsTeam also uses the experience and knowledge of the very users who will be using the solution. Although we could probably think of plenty of ways that we could use children's programming to connect community members or raise literacy, since that design question is being asked for future children's programming, we want to hear kids' ideas as well. We generally work with kids ages 7 to 11, though we also work with teens as well! In KidsTeam, children are our design partners which differs from being testers (children test prototypes of technology) or informants (children inform new technology). The team asks for a long-term partnership between its adult and child team members.

We are lucky to work with a lot of great kids and great collaborators. Along with KidsTeamUW, KidsTeam Libraries was created as a way to explore technology usage in the library space and give kids in different communities the opportunity to be design partners. We have been working with Seattle Public Library for seven years, and have been engaged in other partnerships as well. Most recently, KidsTeam has begun working with rural libraries in Washington State and Colorado, exploring both technology usage and the physical space of the libraries.

The goal of this book is to help you learn the skills to bring co-design into your work as well! We believe that we have a lot to learn from one another and are excited to see where we go next! We recommend you read through the book and take the parts that are meaningful to you, but a good place to start is with Chapters 1 and ?? to get an understanding of what co-design is and why it matters for libraries. Happy designing!

Sincerely,



Chapter 1

Librarianship and Co-Design

You might be wondering, "*What does design have to do with being a librarian?*" Well, think about what we do: we create programs, build catalogs, and design spaces. In a way, we're designers too—designers of access, community, and experiences. This idea opens up a whole new way to think about librarianship, connecting it to *design practices* [Clarke, 2018]. Understanding different design practices and how they can be applied in libraries can help us better serve our patrons and communities. This guidebook is all about one particular approach to solving problems through a process called co-design, a type of design focusing on *participation* where designers work together *with* the community to solve problems.

1.1 Participatory Design Fundamentals

Imagine an adult patron comes up to the reference desk and says: "*I was wondering if you could help me find a book about birds.*" As a librarian, you might have a set of reference questions to work with the patron to understand their specific needs and how the library can best connect them to that information they desire. You might learn, through the reference process, the patron is interested in how the birds' migration patterns have been impacted by the rise of cities in the area. You might locate a book that would help them in a neighbouring library, helping them to fill out a form to have the book lent to the library you work at. In the reference process, patrons and librarians work together, leaning on their individual expertise, to identify how best to approach and solve an information need.

Participatory design, which co-design builds on, takes a similar approach. It's about involving all stakeholders in the design process. For us, that means working directly with the community—our patrons—to meet their needs. While participatory design started out in designing computer-based systems, it has since been adapted for use in libraries [Wood and Kompare, 2017, Yip and Lee, 2018, Fargo and Young, 2023]. As libraries continue to evolve with new technologies and become more dynamic learning spaces, it's essential for librarians to collaborate with the community to address changing needs [Yip et al., 2020].

In participatory design, the process doesn't just produce a final product—it also becomes part of the solution itself [Ehn, 2008]. This might involve making the library's operations more transparent to patrons and inviting them to help refine and modify solutions. It means sharing control over certain aspects of how the library is run, at least in the areas we're designing for. The design process becomes a way to empower everyone involved [Ehn, 2008]. This approach ensures that everyone—librarians, patrons, administrators—is treated as an expert in their own experience, regardless of age, status, or background. At its heart, this method fosters a sense of democracy, giving all participants a voice and a role in shaping the outcome.

Because participatory design is about working with users or patrons, this can be done in a number of ways. Users can take on more or less active roles in the design process. For example, at times users may simply inform the design process. In co-Design, we instead invite them into the process! At KidsTeamUW, we further consider how to bring children into the design process using a specific form of co-design called Cooperative Inquiry [Druin, 1999], as shown in Figure 1.1. This ebook focuses on the use of Cooperative Inquiry as a method of co-design focusing on design partnerships, where children and adults work together as equal design partners; though, the larger principles can be applied to other types of patron groups as well.

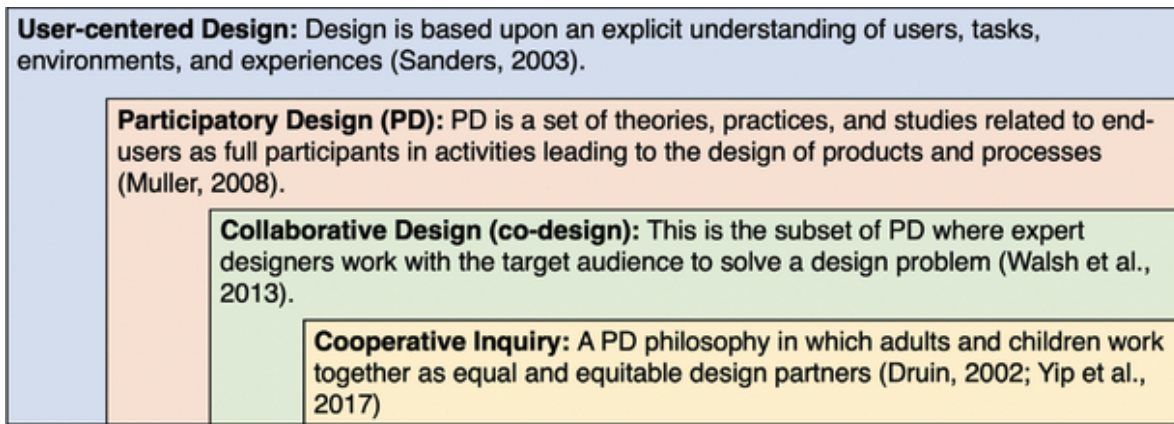


Figure 1.1: Yip, J.C., Lee, K.J., & Lee, J.H. (2020)

1.2 Co-Design Principles

To effectively implement co-design in a library setting, it's essential to delve into the core principles that make co-design successful. This section will outline the key principles to keep in mind when applying this design approach in your own library.

1.2.1 Relationship Building

One of the most important, if not the most important aspect of co-design, is building relationships. In order to effectively design together, you need to build trust within the community of practice/patron group you want to work with. Relationships are built on mutual respect. This means that all those involved, from the patrons to library administrators, have something of value to add.

There are stages to developing relationships, including identifying/reaching out to communities, developing trust, and continuing to develop relationships over time. Each of these stages have different types of consideration to think about.

Identifying Partners/Communities

The first step to developing co-design relationships is to identify the partners and communities needed to help solve your problems. First and foremost, what problem are you trying to solve, and who will it impact? This requires thinking about all types of people who might be impacted by your design. While you certainly will not be able to get everyone, think about those in your community and library who would be most likely to interact with your solution. Are there people that generally do not come to the library? If so, consider how you will reach them and consider ways to meet them where they are. Are there already community groups working with the problem that could help support your work?

For example, let us think about the goal of creating a summer reading program at the library. Who would all be impacted by this programming? Most obviously the children who participate in the program would be involved, but so would the librarians, the children's parents/guardians, teen volunteers, and perhaps even teachers. On top of this, you also might have collection development teams, considerations of space and time of staff, and so on. This means that if you want to create more engagement with the summer reading program (your identified problem), then there are many people involved in making sure that your solution is a success.

Developing Trust

In order to begin co-designing with your identified community, you must develop trust with them. Libraries are already often situated as places within the community to develop trust with marginalized groups [Vårheim, 2014]. There must be buy-in from both the library and the community in order for co-design to work. While you can develop trust in a number of ways, such as finding community partners already engaged in problems you wish to solve or creating specific programming for the patron group you want

to co-design with, it is important to remember that building trust takes time. Communities may be wary of co-design, especially communities who have often been stigmatized. These communities may have reservations about coming to the library and worry about sharing their ideas as equal design partners. Therefore, if you want to engage in co-design, consider developing trust even before you want to begin the design process. Developing trust is an ongoing process. It requires empathy and facilitation during the design process; this is something this book will continue to explore in further chapters.

Maintaining Connections

Once a design session is done, you will want to follow up with your co-designers, letting them know how they have helped and show that their ideas and time helped to make changes within the community. This also means continuing to reach out to them as time goes on, even if there are not currently co-design sessions happening. The more that you reach out and maintain the connections you have made, the greater the trust and the more likely they will want to continue to work with you! Often, maintaining these connections can help to sustain your program over time and even open your eyes to new experiences and problems that the library may be able to help solve.

1.2.2 Facilitation

In co-design, we are not acting as “teachers” in the way that we might normally associate with our roles as librarians. From children’s programming to information literacy, there are many times that the librarian does act as an instructor, teaching the tricks of the trade to their students. However, within the framework of co-design, children and adults work together and lead together.

During the session, try to actively engage participants and create an open and respectful space. This means that if you are leading a co-design session, you should be constantly thinking about the power dynamics of age, knowledge, and status at play, actively working to create an environment that lets all voices be heard. There are expertise that your design partners, such as children, know much more than you, and at times that you may have a better grasp at the problem as a whole. The facilitator should also document the ideas and feedback generated during the session and provide regular opportunities for participants to reflect on and evaluate the process. After the session, the facilitator will lead the synthesis of feedback and ideas generated. Getting good at facilitation takes time. Be flexible and patient.

1.2.3 Design-by-Doing

Co-design is messy! That is why we often call it “Design by Doing.” You have to get into the weeds and work on making solutions together. This requires that we not only talk about solutions, but we create prototypes (sample solutions) to solve the problems.

Co-Design is not about simply asking what would be a good solution, it is about making the solution. If you are designing a new space for example, draw it out, move furniture around, and iterate ideas with everyone. Design is an active experience of solving problems. This might feel different than traditional ways of assessment in libraries, where we passively count heads or send out emails. The solution may not always come from “analyzing data” in the same way, but will come from trying out ideas and making things.

1.2.4 Idea Generation

During the design process, you generate a lot of ideas. These ideas can come from children, adults, patrons, librarians, and designers. Idea generation in co-design is not about finding the one person who had the best idea. It is about listening, negotiating, and often combining ideas together. When thinking about limitations, be realistic, but do not tell people they are wrong. All ideas have a seed of possibility in them. It takes time to learn to facilitate and ensure everyone is heard but focus on combining ideas so that all views are included in the final design. You may not find the perfect idea in one session. Don’t worry and encourage your co-designers to be silly!

1.3 Common Pitfalls and Misconceptions of Co-Design

At this point, it might seem like co-design could be the solution to all our problems! It takes into account all voices at the table and works to ensure that the given solution is good for all through a democratic process. However, there are some common misconceptions that can easily blind us in the design process.

1.3.1 Focus Groups instead of Co-Designing

Firstly, co-design strategies such as those discussed in Chapter 3 are not the same as the co-design principles we just explored. Just because you use activities from co-design such as Likes/Dislikes/Design Ideas doesn't mean you are co-designing. It takes work to ensure all voices are heard, especially when there is a power imbalance, such as working with children. Within this process, design ideas also might be flowing. Some co-designers mistakenly do "focus group-like" activities rather than take time to build longer, stronger relationships. Focus groups maintain that sense of power, and are not actively democratic in their nature. If you are employing co-design, be sure you are thinking about the principles and enacting them to the best of your ability.

1.3.2 Assuming Immediate Collaboration

Co-design also does not automatically mean people want to collaborate together. It takes time and energy to build relationships and skill to help facilitate co-design sessions. Even though you may be offering a platform for patrons to participate in the design process, these relationships don't immediately happen. It may take time for those involved to truly begin to design together. Alternatively, there may be reasons certain communities do not wish to collaborate with others. It is your job to consider how best to support collaboration, and be patient as trust is built.

1.3.3 Co-Design Equals the Best Design

Lastly, co-design also does not guarantee better design. Patrons/Users will not always know exactly what is best for them or understand interacting elements of designing solutions in the same way that a librarian will. To see co-design as a perfect solution is a fallacy. Learning how and when to deploy it, like any other form of problem solving, is key. How do we know when to use co-design? Well, we are glad you asked!

Chapter 2

Identifying Potential Opportunities for Co-Design

There are many opportunities to help patrons, and a big part of helping them is identifying potential problems and assessing how best to solve them as discussed in Chapter 1. Whether it is a one time program, or one that will run over the course of multiple weeks, co-design can be used in a variety of ways in the library. This chapter will outline a few situations and give examples of ways libraries have implemented co-design during programming, assessment, and collections management.

2.1 When to Use Co-Design

Co-design, as outlined so far, is a tool for solving design problems. First and foremost, it is important for you to take the time to identify and clarify the problem. No library necessarily has the same problems and not all problems are design problems. The following section identifies a few of the pros and cons to using co-design to help you decide if it is the right strategy for you.

2.1.1 Why Use Co-Design

Co-Design is Democratic Design.

Typical ways of engaging with our communities might be surveys or conducting need's assessments. While we do solicit advice from patrons in this respect, the patrons are not generally an active participant in the design process. Co-design differs from traditional ways of engaging with assessment or creating solutions by allowing all members of the library community, patrons, administrators, and librarians to be involved in the process. No one voice is more important than the other.

It allows deep insights you can only get through relationship building.

When you build relationships, you get a deeper understanding of the needs and opinions of specific patron communities. When relationships are built on trust, those involved in the process may feel more willing to share their ideas and less concerned that they will be dismissed or glossed over for those who have more power in the process. When you understand the person behind the idea, it allows for greater context and collaboration between you.

It allows for iterative back and forth between participants.

Unlike surveys or focus groups, co-design allows for a back and forth conversation between librarians and patrons. It is an ongoing partnership that allows for the needs and experiences of the users to evolve over time. This iteration can happen within one session, combining ideas, trying out new things, and allowing space for all those involved to suggest changes. Iteration can also happen over the course of various co-design sessions. This means that you can explore and design multiple aspects of a solution over time, allowing ideas from the group to build off each other. Often, you will gain insights at one session that allow

you to pivot and change before the next session. Co-design allows for this discussion across communities to happen before programs and changes are implemented.

It can be done with very few participants.

Co-design can be done with just three people. More people is not always necessarily good. The more people you have the more you have to facilitate. In fact, adding more and more people usually gives you less and less information [Nielsen, 2000].

It can be done with very little supplies.

While adding on large post-its and colored markers can certainly be fun, the co-design process can be beneficial even with a sheet of paper and a pen! You do not need to have a ton of space and materials to do co-design well.

2.1.2 When Not to Use Co-Design

Co-design can be time and labor intensive for librarians and patrons.

Firstly, co-design can be resource intensive; more specifically, co-design requires people's time and energy. Librarians are often already asked to do a variety of different types of tasks and asking them to take time off from their other duties can put a strain on other aspects of the library system or limit personnel who can perform the needed duties to make the library run smoothly.

It is management intensive.

From this, co-design is also management intensive. It is hard to facilitate sessions, think of new ideas, and manage patron expectations. It will take time for skills to build, and it takes a lot of energy to manage co-design sessions.

It is a slow process.

Co-design requires time spent listening and responding directly to patrons. This also includes coming back to the table and negotiation (and often renegotiating) different needs. This constant back-and-forth between designers and patrons can be slow. Co-design isn't always the best method if decisions need to be made quickly and with expertise. However, quick decisions do not always mean good decisions.

2.2 Library Programming

Co-Design can act both as programming itself and help generate more equitable programming for the future. As the needs and interests of the community change, libraries can adapt and use their relationships with the community to adjust as needed. Sessions can be run over a few hours or repeated over the course of a few weeks. In particular, co-design allows librarians to work with generally underserved populations within their community, by building relationships with them and giving them a platform to help generate new policies and programming based on their needs.

The article "Building expansive family STEAM programming, through participatory design research, [Tzou et al., 2018]" describes how they worked with families from diverse backgrounds to co-design Science Technology Education Arts and Math (STEAM) activities and programs that were engaging and accessible to all participants. Through participatory design, families were able to provide valuable input and feedback that helped to shape the programs in meaningful ways. They also found that the programs created through this process were more successful and had a greater impact than programs that were developed without the input of the families.

The article "Toward a More Just Library: Participatory Design with Native American Students" by Scott W.H. Young and Celina Brownotter discusses the use of participatory design to create a more just and inclusive library for Native American students at Montana State University [Young and Brownotter, 2018]. By working with a group of Native American students to identify areas where the library could be improved

to better serve their needs, they created new programs and resources, including a Native American student lounge and a library guide on Indigenous Research Methods. In essence, co-design can be a style of programming that can support and give a voice to those within the community.

2.3 Library Assessment

Feighan & Beni (2020) discuss how co-design was used to facilitate in a school library which had the goal of increasing the use of library platforms through working with students for feedback [Feighan and Beni, 2020]. The article describes how student co-design can be used to improve library platforms and create blended learning outcomes. The authors explain that by involving students in the design process, libraries can create platforms that better meet the needs of their users. Co-Design can also be used to explore questions and illicit feedback about your collections. When working on children's collections for example, working with the children and parents can help to create collections that resemble the needs and wants of the community. It can even be used to help develop digital libraries [Druin, 2005] or give ideas for strategic planning [Somerville, 2007].

2.4 Library Space Management

Co-Design also can be used to help facilitate assessment and decision making when it comes to library assessment as well. For example, imagine your library is interested in making a teen area as a place for teen patrons to come in, hang out, and do their homework. By using co-design, you could work with the teens in your community to help create a space that they want without making assumptions about the types of things that would be helpful to them.

An example of using co-design for space management is "*Participatory Design for Canaday Library—A First Floor Renovation*" by Cresswell and Pumroy. The authors describe a case study of a participatory design project for a library renovation at Bryn Mawr College. Co-design was used to ask for feedback from library staff, faculty, and students about the library's first floor, and the feedback was used to inform the redesign of the space.

Chapter 3

Design Techniques for Co-Design

Before we get into what different design techniques are, the first thing to address is, what is design? [Amy Ko](#) made her own guidebook that introduces people to design, and to start it off she explains:

Design was where ideas came from. Design was methods for generating ideas. It was methods for evaluating ideas. It was ways of communicating ideas. I learned that design was problem solving (Jonassen & D. H., 2000), and that it is design problem solving that shapes the world (2022).

As Ko explains, design is creating the “what,” and to get those, we have to figure out how to do that. The “how” is design techniques. There are multiple design techniques that KidsTeam uses. These techniques become activities when they are implemented in co-design sessions, but the difference between them and a random activity is there is purpose to what we are doing. **These techniques are meant to be fun, approachable to children, and open-ended enough for us to learn new approaches and ideas from the kids.** Our techniques and activities have to walk a line: they need to be engaging and fun enough for kids to want to participate in, but they also have to be designed to allow the adult designers to get feedback on a design goal.

KidsTeam has a handful that we use regularly, and when COVID hit, we had to figure out how those would transfer to a virtual setting, and if they would at all. After a few sessions, we figured out that with access to video calls, most design techniques can be adapted to a virtual setting. We also figured out that there are techniques that we created specifically for virtual settings (FACIT PD) [[Walsh et al., 2013](#)]. This chapter is a list of a few techniques, but it is not exhaustive. Please see the Appendices for further readings if you would like other ideas!

3.1 Bags of Stuff

This design activity is a style of prototyping, where designers and users will create a preliminary version of the design solution. In this activity, children and designers receive bags filled with a mixture of materials that they can use to build and explore different ideas. Generally this activity works well during in-person co-design sessions and with two or three kids in one team, as seen in [3.1](#).

Bags of Stuff is tactile, easy to understand for all participants, and allows for a great amount of creativity. The simplicity of the activity is an important aspect to consider, because if it's overly complicated and takes too much time to explain, there is less time for creating which can be frustrating for some participants. This can also transfer to a virtual setting activity, but planning has to go into sending materials to libraries or households ahead of time.

After the groups have created their prototypes, everyone comes together to present the designs and ideas to one another. When using this activity, have an adult or designer note down the big ideas that arise from all the designs.

3.2 Comic Boarding

Children receive three or four comic panels where the first panel presents a problem that needs to be solved, and the last panel shows that the problem has been solved. It's up to the children to fill in the



Figure 3.1: This picture shows two adults (graduate students) working with three children. There are materials scattered on the ground, and all of the participants are interacting with the materials. There are also children and adults interacting with one another

Figure 3.2: Comic Strip from Fall 2020 577 class

in-between blank boards to show how to solve the problem. This is an excellent activity for both virtual and in-person sessions. For in person, this can be a physical paper that has the comic strips, and they can be filled in using collage materials and markers. For a virtual setting, they can be something like Google Slides, where the editing is shared with all participants so they can edit on the slides.

In this example, you can see the design question is immediately embedded in the first panel. In conversation between the two characters, we as the readers can tell that one character is looking for library programming, but the second character says that's impossible, everyone has to be social distancing. Over the next two slides, we are given the opportunity to figure out how to work paper circuits into virtual programming for children's services at a library. It's up to the co-designers, then, to fill in the comic board with an idea of how to do that.

3.3 Stickies

Children evaluate designs by providing critique in the form of likes, dislikes, and design ideas on sticky notes (KidsTeam, 2022). This is a great in-person activity for later on in the design sessions. While an activity like Bags of Stuff is great for generating ideas, this one is great for getting feedback. Frequently, this technique is paired with the activity "Likes, Dislikes, and Design Ideas." For that activity, which again is usually near the end of the participatory design sessions, everyone meets together as a group and discusses the ideas, what went well, what didn't, and what could be improved. By using sticky notes, all designers are able to see physically on a board what the feedback looks like. Due to the dynamic nature of sticky notes placed on a board, this is good for people meeting in person, but is harder to replicate in a virtual space. Although there are websites and apps that are meant to replicate sticky notes, it lacks the dynamic aspect a little bit.

Stickies are often paired with another design activity called Likes/Dislikes/Design Ideas. In this activity, designers solicit feedback from the co-designers about what they like and do not like about a given design. They also ask for new ideas to make the design better. Each Like, Dislike, or design idea gets one sticky note. You can see the "Likes" section from the activity "Likes, Dislikes, and Design Ideas" in the photo. During the activity, co-design facilitators can also group the stickies into categories, as seen in the markings on the board.

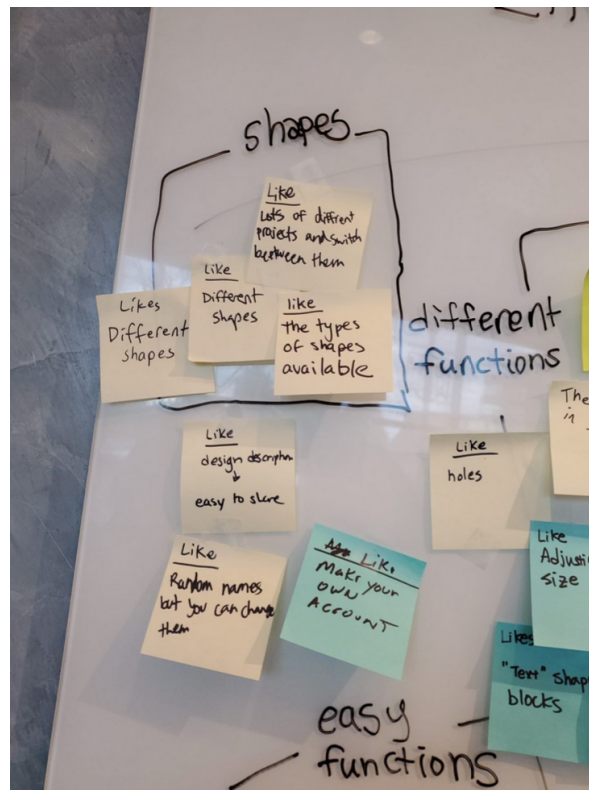


Figure 3.3: An example of sticky notes on a whiteboard. The sticky notes are organized and grouped by different categories.

3.4 Line Judging

Children are given a scenario and are asked to evaluate it by moving to a position on line marked “yes, no, or maybe” (KidsTeam, 2022). This is another activity that is good for getting feedback towards the end of a session. This is an activity that takes up a lot of space and allows children and adults to move around. Traditionally, there are “yes, no, and maybe” sections spread across the room, and designers can line up around the room based on how much they like or don’t like the idea. This is also an easy and good activity for children, whether they have experience co-designing or not. Due to the physical nature of this activity, it is more difficult to translate into a virtual session but you could do so through utilizing online drawing tools.

3.5 Layered Elaboration

Layered Elaboration [Walsh et al., 2010] is a co-design activity that involves building on and refining ideas in a structured and iterative way. Originally, layered elaboration involved overlaying transparencies to build upon ideas, where each group used one color to add on ideas. This can also be done with paper and colors as well.

3.6 Skits

Skits can be an effective tool for acting out more process-based ideas, allowing participants to explore different roles and scenarios in a playful and interactive way. For instance, in one session, we encouraged the children to create their own YouTube videos as a means to understand how they engage with and produce content in digital spaces. By taking on the roles of content creators, we were able to learn about their thought processes, decision-making, and creative approaches to designing and sharing media online, giving us ideas about how to design activities to support their experiences using digital technologies.

3.7 Mixing Ideas

Mixing Ideas is a co-design activity that involves combining and remixing ideas generated by different participants to create new solutions, scaffolding the design experience for younger children to help them see their ideas in the final design [Guha et al., 2004, Guha et al., 2013]. This method has each team member first contribute an idea, forming them step-by-step into a final plan.

Chapter 4

Logistics of a Co-Design Session

There are a lot of things to consider when designing and implementing your co-design sessions. Firstly is the importance of scheduling! This sounds obvious, but while co-design is flexible, changing plans and adapting on-the-go, having an overall structure is necessary. Within that falls the importance of time constraints and management. Activities shouldn't be given so little time that nothing can get done, but having a somewhat fast turnaround ensures that groups stay on task and think quickly on their feet.

Other components that are important are breakout sessions, where groups can work together and create something, and then come back together and share their work with other groups. In smaller groups, it is easier and more comfortable for some to share ideas, and the time crunch requires quick-thinking teamwork from everyone.

4.1 General Session Structure

While you can adjust sessions to fit into your own needs, there is a general flow that co-design sessions often follow:

1. **Relationship Building (15 min):** A time to talk with the kids, eat snacks, and get to know one another. This is an important time for building trust between co-designers.
2. **Circle Time (10 min):** A time where you ask a "Question of the Day" to get everyone thinking about the design goal. During this time, the design activity is also introduced.
3. **Design Time (20-30 min):** Break out into smaller groups and work through the design activity.
4. **Discussion Time (10 min):** Have everyone come back from their groups. Share out what everyone has designed. Ask any last questions to help everyone summarize what the session tells us about the design goal.

It is important to plan out your timing for each of these parts of the session, building in time for transitions and movement between large and small groups.

4.2 A Sample Schedule

When it comes to leading a design session, there are also little tips and tricks that can help! Below is an easy example to follow for creating an hour-long design session with students and adults. This guide can be followed regardless of whether or not sessions are being held virtually or in person.

- 4:15 Adults will gather in the breakout room. The leads will give instructions about the plan of the day. At this time the leads can share any links or materials the adults should have.
- 4:30 The children will start coming in.
- 4:30-4:40 The leads will ask the question of the day and the leads will also explain the activity.

- 4:40–5:10 (Design Session in small groups - 30 minutes)

The graduate students, children, teens* and librarians will engage in the session. The leads can come back and forth from the main session to check in with different groups or remain in the same group. The leads will be in charge of keeping the group on track. However, the host will give a five-minute notice when time is up.

- 5:10–5:20 Everyone comes back to the Main Room and the leads lead the groups to present.
- 5:20–5:30 (Second Round Design Session-Main Session)

A very brief overall reflection from children and adults about the activities. Host can ask the leads what they saw and the leads can ask 1 2 questions to the children, teens and librarians.

* In this situation, teens were brought in as volunteers to help facilitate the design sessions. This is an easy way to both break out into smaller groups and balance out the adult-child power dynamic!

4.3 Planning a Session

4.3.1 Deciding on a Design Goal

What prior knowledge do you all know about the topic with children / youth? What knowledge is missing that we do not know about children / youth in this topic area? What's the motivation for the co-design session for children / youth?

4.3.2 Deciding on an Activity

What is the "Question of the Day"? What co-design technique is used? Why use this technique? (Reflect on Walsh et al.'s (2013) FACIT PD framework) What is the plan for the day? Include your timing for each part of the session. What discussion questions are important at the end?

4.3.3 Deciding on What You Want Out of the Session

What kinds of data do you want to collect? What artifacts are generated from the technique? What will your analytic memos and observations focus on?

4.3.4 Connecting the Dots

How does this plan connect with digital technologies that children / youth encounter? How does this plan connect with children and youth in libraries? How does the overall co-design plan connect with the main design goals and research questions?

4.3.5 Considering Challenges

What are the limitations and challenges your group might anticipate? How will you anticipate to address such challenges?

4.4 Logistic to Consider

4.4.1 Relationship Building Logistics

1. **Snack time and hanging out:** have some time before and after co-designing sessions to hang out and talk about things outside of the context of the session. Ask about how everyone is doing and get to know their likes and dislikes. This step is one of the most important aspects of the process because it can build trust and camaraderie between patrons and library staff. It can seem tempting to skip this step in order to save time, but build in this time to just hang out. Snacks also always help!

2. **Allowing for goofing off:** When co-designing, don't think of it as a classroom or feel the need to ensure that.
3. **Talking and getting to know kids:** While this is part of hanging out, also put effort into remembering things that kids say and things they talk about. Like most relationships, getting the time to know your patrons on a personal level takes time and effort to make sure they feel they can trust you.

4.4.2 Facilitation Logistics

1. **How will you organize the groups?:** All kids and adults have their own personalities and needs during the co-design process. As you get to know everyone, consider who might work best with who. Decide if you want to rotate groups, how big you want groups to be, and what activities will work best depending on your space and time.
2. **Aim for a variety of Designs:** You don't want everyone to make the same design. Think about how you can scaffold the session to encourage originality and authenticity in the participants' designs.
3. **Helping to learn how to lead:** You might have youth helping you with kids or other librarians you are helping to train. We all start somewhere. Consider when planning your sessions how you can give others the opportunity to learn how to lead during the process. Can they take on writing out the big ideas? Can they be in charge of leading a small group?
4. **What type of data do you want?** Co-design can give you a lot of great information, if you are clear about what you want to learn. Comic Boarding and Bags of Stuff can give you very different types of data. Consider what will answer your questions the best!
5. **How will you record your data?** Most likely, you will want to be able to see sessions later on. How will you record the session? Do you have a camera or recorder? Will you take pictures of the physical prototypes or will you have a place to store the papers used?

4.4.3 Design Together Techniques, Planning, and Logistics

1. **Give yourself ample time to plan:** Making co-design sessions is a lot of work
2. **Get your materials together before the session:** If possible, it is a good idea to get to the session at least 30 minutes before it begins, if not earlier. You will want to be able to set everything up and don't want to be worried when running the session.
3. **Consider having help:** As a facilitator, you will be doing a lot during the session! Consider having another librarians or a teen help you manage the logistics of the session
4. **Expect things to not go as planned:** Sometimes you have a perfect session... and sometimes your computer dies in the middle of prototyping. One of the most important parts of co-design is being able to be flexible. Give yourself back up plans and laugh it off when things don't go as planned.

4.4.4 Idea Generation Logistics

1. **Running a final discussion:** At the end of the session, bring everyone back together. Beginning by reviewing the session goals and have each group share out their ideas. Also work with everyone to synthesize what you have learned. Write them down or be sure to record them in some way!
2. **Sharing ideas:** When will you share ideas? Certainly at the end, but this also means ensuring that everyone, even in their own groups should have a chance to speak and share their ideas. When facilitating, work on building in times to check on each participant. Learn in what ways they like to share their work. Sometimes they might like to speak and other times they may prefer to simply write it out.
3. **Mixing ideas:** One of the best parts of co-design is bringing ideas together. Build in times within the design process to put ideas together. Try switching groups or combining two prototypes.

4. **Being able to ask questions:** Create a space where asking questions is encouraged. Ask questions yourself and allow others to ask questions as well. It is ok to not know the answer yet. We will work on it together!

4.5 Co-Design Online

You can adapt co-design to work online as well! It can present some new challenges, and more attention must be paid to ensuring that everyone is included. You can decide between different forms of co-design online:

- A **synchronous session** happens when all participants log on at the same time for the activity. The pattern of a synchronous session will align relatively closely with the pattern of an in-person session. While you can't provide snacks, you can still take time at the start of the session to do the work of building connections with your design partners. Depending on how old your co-designers are, you might need to enlist help from parents or adults. Be considerate. If children are younger, they may or may not be able to share their screen. You need to keep them engaged with the activity during the design time.
- **Asynchronous sessions** happen at different times for all participants. You will need to consider how you will communicate with the participants and how you adapt your facilitation of ideas to an asynchronous format. This might require different types of technologies, communicating through email or other social platforms.

Since the onset of Covid, programming has been especially difficult, especially given how quickly things can change from month to month. To prepare as best as we can, it is important to always have multiple plans in place. Since programming usually needs to be planned months in advance, it is best to have virtual, hybrid, and in-person plans, or at least two of the three. The program outline doesn't need to change too much between the different options; experience shows that most design techniques can still work in a virtual environment. The planning for the program is what needs to change the most. For example, if a program must be online, before the program starts the codesign team needs to make sure that all necessary materials are sent to the children's houses and there is a conversation with families about how the codesign team will communicate with the children (i.e. Zoom, phone calls, etc.). You will also need to consider what tools are already used by your community. For example, youths might use Discord or Twitch. Meet them where they are!

That being said, there are other reasons for programming to be online. If KidsTeam is working with a partner who is not nearby, we may be only able to communicate online. A partner may also request the program be online to include more people. Onlining programming can be advantageous for people due to Covid, traveling limitations, and being able to have a more diverse group of participants.

Working during Covid has proven how possible online programming is, there are just adjustments that have to be made. Looking back at the in-person day schedule example, only minor changes need to be made to make it virtual programming. All participants can meet in the Zoom room, introduce the activities for the day, break out into breakout rooms, and then come back to discuss. Given the schedule example that we have, the main changes made would be the activities and methods of co-design. Since walking around and observing people in the library is not an option on Zoom, it would have to be replaced with something else.

Some of our activities and methods transfer very well to Zoom programming. Comic-boarding can be done online using a platform like Google Slides, where you can put comics on each slide, and participants can edit the slide. Most of our other methods can be adapted to Zoom and online programming, it just takes more patience and improvising. For example, when kids keep their cameras off, when Wifi is unreliable and they can only use the chat feature, etc. facilitators may need to adapt. As long as the children are having fun, and the design question is being addressed, then the important parts are covered.

4.5.1 Online Tools

You will need some sort of tool for communicating over the course of the session online. Consider, based on your community, what will be needed and how much will you need to provide to your patrons before

the session. This might include providing patrons with a camera for pictures or tablets to use video conferencing software. Additionally, you might consider online tools such as Miro, a design tool that allows users to place stickies.

4.6 Example Co-Design Session

Below is an example of a schedule for a one day KidsTeam Library session. Based on past chapters about techniques and co-designing with children, try to think critically about what activities were chosen based on the design goal. In this design example, we tried to answer the following question:

What's the role of the library in helping kids create stories in video games?

4.6.1 Design Goal

Determine how children interact with librarians. How does the librarian help them? What can the librarian do for kids that they are currently/not currently doing? Open ideation related to the library and librarian's role in helping children create stories.

4.6.2 Techniques Used

Real-world exploration, Stickies, and Skit/roleplay

4.6.3 Overall Plan

Children will design a story set in the library, with a child-created librarian as the protagonist that navigates the library space and helps a patron.

Participants will:

Break into four groups, depending on number present (aim for 3-4 children in each group and divide the adults as evenly as possible).

Phase 1

1. **A Groups** (2 of the small groups) head upstairs for library exploration. Children (and adults) write down everything they see people doing in the library on A Stickies.
2. **B Groups** (2 of the small groups): The other children write characteristics of librarians (personality, what they do, how they treat others) on B Stickies. (Use Richard as a source of information for answering/asking any questions children have).

After ten minutes, the groups switch places. (Upstairs vs. Downstairs).

Phase 2

1. Lead the Circle Time question and provide instructions for the two Phases.
2. Collect stickies generated by the groups in Phase 1.
3. Use collected stickies for ideation organization on the whiteboard.
4. Observe groups and take notes and add additional stickies.

Facilitators will:

1. Groups will create a 1-2 minute skit based on a patron they want their librarian to help in the library. What does the patron need? How can the librarian help them?

2. Each small group will act out their skit for everyone.

Closing Discussion Summarize results of the Stickies and the Skits. What did you learn about librarians? How can librarians help you navigate the library?

4.6.4 KidsTeam SPL Agenda

- 3:30 - Snack time/circle time. Circle question of the day: What's your favorite part of the library?
- 3:45 - Phase 1 Instructions. Split children/adults into the four individual groups; two of those groups will be within "Group A" for the first phase and two will be in "Group B". (Planned during circle/snack time, once we see how many children are present)
- 3:50 - Phase 1: (A/B group activities)
- 4:00 - A/B groups switch
- 4:10 - Phase 2 Instructions
- 4:15 - Phase 2: Skits
- 4:35 - Skit Presentation
- 4:45 - Circle time and conclusion discussion
- 5:00 - Children are dismissed

4.6.5 Data Collection

- Phase 1 Sticker collection: A Stickers are what people see in the library. B Stickers are what characteristics the librarians have.
 - Facilitators collect stickers and arrange them in categories on the whiteboard.
- Phase 2 Sticker collection: How do they think librarians help people navigate the library? What do they think librarians do?
 - Facilitators add these to the themes on the whiteboard.
- Closing Discussion: Facilitators take down notes on wishes and ideas participants have about libraries, librarians, and storytelling.

4.6.6 Limitations and Challenges

- A limitation to this will be different personalities dominating (or not) the group skit. We are hopeful we can counter this (based on which participants show up) by dividing specific children into different groups.
- One limitation to our exploratory Sticker challenge is if there are not any patrons/enough people in the library, our back-up question will be: *What can people be doing in the library with the things you see around you?*

4.6.7 List of Materials

- Four stations (table w/chairs, books, monitors, pens/papers, other library-related materials and props)
- Three Sticker colors (A Stickers, B Stickers, Phase 2 Stickers)
- Pens & Markers

4.7 Adjusting for Online

The example above is meant for in-person programming, but adaptations can be made to adjust this for a virtual session. Having breakout rooms on Zoom is a huge asset for co-designing sessions for example. Despite this, reliance on technology leads to new challenges. For example, even if you set up a Zoom link, not all patrons will have a camera or microphone in order to participate. If a program has to be online, the co-design team needs to make sure that all necessary materials are sent to the children's houses before it starts and that there is a conversation with families about how the co-design team will communicate with the children (i.e. Zoom, phone calls, etc.). Thinking ahead to problems that could happen and having backups already in place can result in a less stressful session for everyone!

Since programming usually needs to be planned months in advance, it is best to have virtual, hybrid, and in-person plans, or at least two of the three. The program outline doesn't need to change too much between the different options - experience shows that most design techniques can still work in a virtual environment. There are also many great aspects about doing co-design online, and there are a variety of types of digital tools that can be used to help facilitate a seamless and almost analogous experience to co-design in person.

4.8 Some Questions to Consider

- If you check the breakdown of the time, the design session is really about 15-20 minutes as there may be time spent making groups and answering the questions of the day, so you might want to select a really simple activity or questions the children, teens, and librarians can engage in.
- While the host will be helping to create breakout rooms, there will be a lot of time spent on moving kids around. Oftentimes children come late and jump out.
- There will be children without materials or with their cameras turned off.

What could be included in your report?

- First of all, can you share what it is that your group is interested in learning? [The Topic]
- How would you like to learn what they are interested in? [The technique]
- What are the logistics to consider?
- What materials do the adults need?
- What should the adult or teen know?
- What are the roles your leads will do in facilitating the session?
- What are the lists of things you think can go wrong?
- What are ways children can have fun?
- What is your rationale in selecting such a technique or method?
- Overall Reflection of the day?

Chapter 5

Tips and Tricks for Starting Your own Co-Design Team

5.1 Tips for Working with Kids

Even if you have experience leading a design session, working with children in a design session comes with its own challenges and adaptations. This series of tips was created from UW KidsTeam working with the Seattle Public Libraries, and are important and useful things to keep in mind anytime you're designing with kids!¹

5.1.1 Be cognizant of Power Dynamics

Relationships between children and adults are almost always (and necessarily) unbalanced. Children require the boundary setting and supervision of adults to grow into healthy and functioning adults. It is, therefore, difficult in adult-child PD, because that unbalanced relationship has to be temporarily balanced for true PD to take place.

When working with children, think about ways to create a balanced partnership. When building and running your co-design sessions with children, consider your role within the dimensions of facilitation, relationship building, design-by-doing, and elaboration. As with any social context, our roles within this process exist on a continuum.

One way to help address this power imbalance is through co-creating written group norms with kids, teens, and adults in the program – something on poster paper for everyone to develop and revisit for quick reference in behavior engagement situations. People Before Technology, One Mic, Participate, Safe Space, etc. are great ideas to “plant” but go into the discussion ready to amplify what kids suggest. Ask each other “where’s the fun?” when designing each co-design session. As they should, kids will find a way to have fun if it’s lacking in your design.

Work together to memorize kids’ names. Recalling names after only a few visits can be hard, but positive relationship-building in early sessions pays off later. Make sure everyone wears a name tag always, that way you will know their name.

Think about implicit bias you might have with children. Who do you discipline? Who do you favor? How can you treat ALL the children equitably? An example we have seen before is an adult asking some kids to put their phone away (girls) and not others (boys). It can be helpful to see how implicit bias plays out.

5.1.2 Be Patient and Have Fun

Kids have a lot of energy. Be patient when they get distracted and let them know it’s ok to have fun. Co-design is different from school. Let them jump up and down, let them explore and try new things. It can be easy to want to get them to give answers immediately, but be patient. Co-design works through letting kids (and you) have fun!

¹Special thanks to Juan Rubio, Richard Council, Erin Moehring & Sunny Kim.

5.1.3 Learn about the things they like and who they are

Kids are like anyone, they want to be appreciated and listened to. Develop relationships with the kids from the start. If you know what's going with them, you will better understand their behavior and will be able to help them more. Work hard to get to know the kids. Ask them a lot of questions. Find out what interests them. If they are disengaged from an activity, knowing their interests can be a great way to redirect their attention back to the activity. This means you might need to take some time before a session to learn about tv shows, books, or games they like. Don't be dismissive of their interests. Help them make connections between what they are doing and how it relates to their interests/identity.

5.1.4 Bob and Weave when needed

When a kid is distracted or not engaged with the activity, call their attention and then move on. I see facilitators that focus on that child only. The activity becomes about that to the detriment of the rest of the group. If the behavior repeats, call it and again and move on. If the behavior is too distracting for all, give the child another task. Do not force their engagement. Consider taking them out of the room or providing them with a different role (pass markers, keep time, etc.).

Think about how it may not be that the child doesn't want to participate, but rather that the activity is not engaging them. Be critical about what you are providing to the child and be ready to adapt. Maybe the activity is too challenging for their age. For a kid who always succeeds, a challenging activity might be frustrating and they can get angry. You might need to provide extra support for that child. Again, reframe their engagement about the activity you designed rather than focusing on an unwillingness to participate (although of course sometimes that might be the case).

5.1.5 You make the weather: enthusiasm breeds enthusiasm

If you come to the room excited for what's about to happen, the kids will too. It can help make the session run more smoothly if you are excited to be there, putting in the effort to check in with the kids and be excited yourself.

5.1.6 If you don't have a plan for them, they have a plan for you

Make sure people know what they need to do, guide them. Although you are designing with them, there's a group leader. Identify the roles of facilitators. Often, it is helpful to have one person in charge or managing the session as a primary facilitator. This helps to keep everyone on the same page, and allows the kids to know who to look to for the structure of the sessions.

5.1.7 Highlight achievements not failures

Make sure you acknowledge the good work a kid is doing. It can be a bit scary to share one's ideas. Kids often don't participate in experiences where they take on a primary role. Sometimes, like we all do, kids may not complete the activity exactly as planned. Rather than trying to tell them they are doing it wrong, focus on helping them build confidence through letting them know they have interesting and exciting ideas.

5.2 Tips for Working with Adults

Adults will also need to practice facilitating. Many of the same tips for working with kids also work with adults, but here are a few extra for the adult co-designers too!

5.2.1 Remind Adults that we are Co-Designing

It is easy to fall into the trap of thinking of co-design as a classroom. Certainly, children are learning while they design, but a design goal is not the same as a learning goal. Help adults focus on treating the children as design partners, letting them learn through play.

5.2.2 Tell Them Not to be Scared

Some adults may have some experience with children, but some may be more hesitant. Help encourage adults to engage with the kids and interact with them. At times, having teens can help with this, as they can act as a bridge between kids and adults! It also is a great way to let teens take on some more responsibility during the sessions.

5.2.3 Introduce them to the Design Goals and Schedule

Before the session begins, take some time to introduce the session goal and design activity. By giving the adults some more understanding of what you want, they can help to steer the design activities toward the goal as well as prompt questions for the groups to reflect on.

Chapter 6

Adapting for Different Situations

6.1 Settings

The setting and location of a library can significantly impact its ability to engage in co-design activities. For example, rural libraries may have limited resources, including technology and funding, which can impact their ability to provide certain services and programs. They may also have a smaller pool of potential participants to engage in co-design activities. In contrast, cosmopolitan or city libraries may have more resources and a larger pool of potential participants, but may also face unique challenges related to diverse populations and competing community priorities. As such, it is important to consider the unique strengths and challenges of each library setting when planning co-design activities, and to tailor the approach to the specific needs and characteristics of the community.

6.2 Cross-Cultural

Co-design can be an effective approach to developing programs and services that are culturally responsive and inclusive. There are two layers to ensuring that you are engaging with all people within your community. Firstly, make sure that you invite members from diverse backgrounds to be a part of your co-design process. Some cultures may be more open or able to participate in library programs so it is important to consider the systemic inequities that may prevent patrons from being able to participate. Also consider how communities interact, know your own community, and ensure that people feel safe and confident so that they can engage with their full selves in the sessions. During the session, raise the voices and perspectives of historically marginalized groups. By incorporating multiple cultures into the co-design process, libraries can create more meaningful and relevant programming that reflects the diversity of their communities. You may also consider holding multiple co-design sessions to better understand the needs of a specific community.

6.3 Special Populations

Special populations may include individuals with disabilities, seniors, non-native English (?) speakers, and other marginalized or underrepresented groups. In order to effectively engage with these populations, it is important to consider their specific needs and experiences, and to provide accommodations and support as necessary. This means that you may need to consider adapting the co-design process to accommodate different communication styles or physical abilities, or providing resources and materials in alternative formats. It might also mean you will need to go into the community to engage with these populations or hire librarians who work within these communities themselves.

6.4 Multi-Modalities

Running a co-design session both in-person and online can provide greater flexibility for community members to participate, and can also enable a wider range of perspectives and voices to be included. However,

it is important to carefully consider the logistics of running a hybrid session.

For example, the facilitators must ensure that everyone is able to fully participate, regardless of whether they are in-person or online. They may need to use technology tools such as video conferencing and digital whiteboards to facilitate collaboration and brainstorming, including for in-person participants. Additionally, it is important to create an inclusive and equitable environment by ensuring that everyone has equal opportunities to share their ideas and that all voices are heard and valued.

Chapter 7

KTUW Case Studies

7.1 Case Study 1: In-person Libraries SPL

7.1.1 Context of Fall 2019

In the fall of 2019, Jason Yip's class "Participatory Design in Libraries" at UW's ISchool, graduate students met with youth from SPL, with the support of branch librarians and teenage volunteers. For this quarter, KidsTeam was working with 3D printers, and asking children how they could be incorporated into libraries. For this session, they met in person (the library students were divided amongst three different SPL branches) at a library branch with children and volunteers.

7.1.2 Details of the Case

Snack and Children Arriving:

One child, Kyle, arrived at about 3:00 as usual. Most of the children arrived between 3:00 and 3:15. As they arrived, they got snacks and sat down to chat. Some got on a Chromebook at one of the tables. Once again, Sylvia brought her own computer. Helen offered to share her body glitter with adults and children. As this was happening, I was on a Chromebook with Kris, making sure we could complete the planned task for the day and checking the dimensions in the email forwarded from Kung Jin. At about 3:30 Kung Jin called circle time and most of the students came over quickly. Wendy was delayed by a water spill on the snack table.

Circle Time:

There seemed to be more snacking than usual during circle time. Ryan and Minhyung were still messing with and troubleshooting the 3-D printing process. They were a part of the circle, but much of the time their backs were to the circle. Tiffany was interested in what her brother, Ryan, was doing. She sat on a chair next to him but faced the circle most of the time. When it was Ryan and Minhyung's turn to share they turned for a moment before turning back to their project. Towards the end of circle time, Soren got up to walk across the circle, she tripped in the middle, and huddled down in a ball, head to the ground, until the end." (Benson, 2019).

After the Circle Time, Kung Jin (KidsTeam lead at this branch) explained the activity for the day, "she told the students that they could choose to print the letter of their first name, a different letter, or a circle. During the process Kung Jin and Ryan would be collecting sticky notes with the likes, dislikes, and design ideas. Neon-green stickies were used to signify likes, dislikes, and design ideas for Thingiverse" (CITE). The results of the stickies activity are shown below:

7.1.3 Case Reflection

What is interesting about these in person sessions, as opposed to the virtual sessions in later years, is the bonding time that is scheduled into the sessions. During Zoom sessions, there are breaks scheduled, and

plenty of talking time included, but it doesn't quite equate to the in-person sessions. Below is an Analytic Memo from one of the graduate students, which describes part of the schedule for that session.

The image of the sticky notes is helpful because it shows the huge benefits of using stickies as a design technique; it provides valuable information to the designers, and is easy, fun, and dynamic for the children contributing. This is one of the few techniques that seems harder to replicate in a virtual setting. A large reason why this technique is successful and fun is because of the dynamic nature of all the designers getting up and moving the stickies around a large whiteboard, forming patterns. An interesting component of this stickies image is the editing and grouping that is happening with the dark circles around different stickies. Although it's unclear from the Analytic Memo if those additions were made with the children's input or if it was just graduate students, those circles show patterns being found in the feedback from the children. Although it's possible to replicate a whiteboard virtually, it may not quite have the same effect or feeling. Perhaps some designer in the future will find a way to do so.

7.2 Case Study 2: Online Libraries SPL

7.2.1 Context of Fall 2020

When Jason Yip teaches his class "Participatory Design in Libraries" at UW's ISchool, the graduate students help with KidsTeam's sessions at SPL. In the fall of 2020, this was done virtually for the first time. During this session, Yip's class was divided into three groups, where each group worked with two different branches of SPL. The graduate students met with the branch librarians, teenager volunteers, and children over Zoom once a week for seven weeks, and together they built paper circuits and brainstormed how paper circuits could be used in the future of library programming.

7.2.2 Details of the Case

At the end of each session, the graduate students were instructed to write "Analytic Memos," which summarized what had happened and gave insight into how the students felt the sessions were going. An example of an Analytic Memo after the first session is as follows:

Today we had our first meeting with the children we will be working with for the class. We met virtually, but are working with the High Point/South Park branches of SPL. For this meeting we all introduced ourselves and broke off into two groups to do some simple design challenges. There were eight UW students, Jason Yip, two librarians, and six students. As a large group we all made introductions and answered a couple of fun questions to make everyone a little more comfortable, and then we broke up into two groups to do five design challenges. ... For the first challenge, which was taking a picture of everyone making the same face, Gabe didn't want his camera to face him. He had said earlier though that he liked to draw, so we made the suggestion that he draw a face and we all would try to make that face in the picture. I had been nervous before class that it would be stressful when the kids chose not to participate, but I was surprised how quickly we came up with a solution that went along with him not showing his face, but still participating in the activity. At some point later on Gabe did end up turning his camera on to show his face to join in on the challenges, but he would also turn his camera off or away from him often. For the second challenge, we had to find three different items we all had, and that felt like one of the more collaborative challenges. We took photos with a pen first, and then for the second we did some form of tissues. For that one Gabe became more involved, turned his camera to face him again, and stretched the definition of "tissue" to include paper, which the adults all liked. Lastly we did keyboards, which went smoothly. William was totally down for participating and had his camera facing him most of the time, but it was a little difficult sometimes to get him to turn his mute off. The third challenge was us all taking a picture with the same color. Gabe then turned on his camera again to show him gone from his chair and he typed "invisible Gabe." I was surprised again at how easily that pivoted to us deciding to be invisible, and turning our same color into clear for the challenge... -(Johnson, 2020)

7.2.3 Case Reflection

This memo shows how dynamic co-design sessions are, and how much adapting and on-the-spot problem solving goes into co-design. “Invisible Gabe” leads to “invisible” being our color, and no cameras turned on leads to one student drawing a face and everyone trying to replicate it. This memo is from a first co-design session, where the priority is on breaking the ice with the children. Although the graduate students were given prompts to follow, those can easily go out the window when working with children. The point is to make this a fun activity!

This case is also interesting to look at because it was one of the first attempts at KidsTeam to do virtual programming. As Kaye said, this was the first session, and the activities were aimed at introducing everyone and beginning to form relationships. The technique used is not one that we have seen before; taking photos of themselves or items and posting them to a group Google Slide. This seems like an excellent way to both encourage cameras to be on (when it’s possible) for bonding, and it’s an innovative way to adapt techniques to a virtual setting.

7.3 Case Study 3: Online Libraries Rural

7.3.1 Context of Spring 2021

During the spring of 2021, a UW capstone team ran our first participatory design series with a rural library in Whitman County, WA. This series had five children participants (all between the ages of 10 and 12), two rural librarians, and 2-3 KidsTeam graduate students. Both the planning sessions and the sessions themselves were all attended virtually through Zoom, and communication happened via email. This series ran for five weeks, and for each session everyone attended for one hour once a week.

7.3.2 Details of the Case

Before the series started, KidsTeam students had sent out “Bags of Stuff” to the library, where the librarians distributed the bags to the children. The children were given a homework assignment before they all met for the first time, where the kids were asked to create something from the Bags of Stuff that was important to them. The schedule then ran as follows:

- **Week 1:** We established the practice of virtual circle time (each participant shares their name, age, and answers the question of the day). This practice was continued by Thalia and Linus in the following sessions. Additionally, after a brief intro to the Mindstorms, we played a teambuilding game ([sliddeck](#)).
- **Weeks 2-3:** These sessions were primarily focused on teaching the kids to program with Mindstorms. These sessions were more instruction-driven.
- **Week 4:** Thalia asked KidsTeam to prepare a 15-minute design activity to get kids talking and more engaged with each other. We created a [sliddeck](#) to complete a Big Paper activity answering the question: “How can Mindstorms help you connect with your friends?” Thalia was not at the session, and although we discussed our planned activity with Linus prior to the session, we did not have time to do the activity.
- **Week 5:** Before the final session, we discussed with Thalia and Linus how the final session should look. They sent us a schedule ahead of time and asked for our input about how to wrap up the program. KidsTeam prepared a 15-minute [Likes, Dislikes, Design Ideas](#) activity with a collaborative whiteboard and planned group games for the final 20-25 minutes of the session in the spirit of the usual KidsTeam final-session party. The kids contributed some good ideas to the whiteboard while simultaneously drawing and copy-pasting Pokemon pictures to the whiteboard. This felt like a more typical KidsTeam session with a mixture of contributing ideas and fun. We finished the session with a game of Pictionary.

Figure 7.1: (KidsTeam Rural, 2021)

7.3.3 Case Reflection

These sessions, which were run in Whitman County, followed a typical schedule for our KidsTeam sessions. Luckily, communicating virtually was not a large barrier, except when it came time to troubleshoot the Mindstorms. Although troubleshooting the Mindstorms was more difficult than was expected, these sessions were valuable to both KidsTeam and to the Whitman County library because it was a pilot for what virtual programming could look like. These sessions, from their inception to the planning to the execution were fully virtual, and from a design perspective it taught KidsTeam a lot about the limits and possibilities for future planning. One of the graduate student leads summed this up best in one of their Analytic Memos:

As we wrapped up it was reiterated to the children how important this team is right now. It is up to them to help design future programs for children in the library. Times are different now and even though we are getting to the aftertime of Covid things will never be the same again. The kids were told that they are the test team. It is up to them to help mold this program and make recommendations for the future. Lastly, they were told that they hope to expand the virtual program to include more children and maybe even expand into other states but that this could only happen if they help create it. -(McGrew, 2020).

7.4 Case Study 4: Co-Design with Email and Phone Conversations

7.4.1 Context of Fall 2021

In Fall of 2021, Kung Jin taught the UW class “Participatory Design in Libraries,” and two of the students in that class worked with a rural library in Chewelah, WA. The capstone team from spring of 2021 had already planned a possible series of sessions for this library, and looking at this planned schedule and at the schedule and format that the sessions actually took provide an interesting look at what planning programming looks like during the pandemic.

7.4.2 Details of the Case

This plan above, which is also shown earlier on, was not used for the actual sessions. For this series, there were five weeks of meeting and designing. There were four children and two KidsTeam students, and they communicated solely via email and phone conversations. Similar to the original plan, the programming was centered around the question of “What does the library mean to you?” The families were sent design kits which they used to craft and answer questions during the series. Although the parents were actual participants of this program, they played a large role in the sessions since the children were using their phones and there were a lot of changing schedules and technical issues that required input from the parents. The KidsTeam students described the sessions as thus:

Working with rural families comes with difficulties that are unique to rural areas. For example, cell service is very hard to come by for both the — and —, and a call can drop at any minute if they are on the road, so we mainly communicate over a home phone. Home phones are also tricky because kids can walk out at any moment, and we cannot see who we are talking with. During the first few sessions, it was hard to tell who was talking and there were a lot of awkward pauses due to nervousness and the unfamiliarity of the situation. In order to know which child is talking on the phone (especially with the — family) we have started asking questions individually with their names. This has also helped to minimize parental involvement and interjections. For ourselves, we have started to write scripts for the week, so we know who is going to begin the next topic when the previous one starts winding down, so the conversation flows better and feels more natural. Both — and — (the mothers) are very busy. At times they have to cancel or reschedule the call to accommodate their fluctuating schedules. As a result, email has been a vital communication component throughout the quarter for multiple reasons: it provides a backup design session

overview if calls drop or the week is critical to get through so that we stay on track; it allows us to send designs back and forth; and it allows us to communicate throughout the week. The hardest thing about phone calls and emails is connecting with the children. -(Bryant, 2021)

7.4.3 Case Reflection

As seen above, there were a lot of changes between what was planned and what happened. This session with the Chewelah library was significantly different than even the design session with the other rural library in Whitman County. As the graduate students said, working with rural libraries comes with a lot of different circumstances and thus needs a more individualized approach than urban libraries. This case is also interesting because of the format of the sessions. Our partner in this situation did not have regular access to wifi, and that drastically changed the techniques available to KidsTeam, the activities available, and the level of bonding the designers got to form with one another. Interestingly since communicating in a Zoom room wasn't an option, these sessions were almost more similar to our in-person programming. All of the activities and techniques are physical, with conversations happening over the phone. The only truly virtual component of these sessions is when pictures of the physical activities are shared over email.

Concluding Thoughts

Wow, we covered a lot of material. Hopefully, after reading this, you are more comfortable with the prospect of participatory design, and more excited to apply these ideas in your library community. The process of creating this guidebook began with hearing librarian feedback after working with KidsTeam, and we are hoping that this is a tool that people feel comfortable accessing whenever they feel the need. Although it was said at the beginning, it is worth reiterating that the goals of KidsTeam are to create solutions to library and other organization problems. After hearing librarian feedback, we realized that in some instances we created more work for our partners, and in some instances confusion as well. Participatory design is a new concept for most people, but we don't want to over burden our partners with essentially a course in participatory design. With this guidebook, we effectively designed a solution to this problem; self-guided learning! We hope you take in however much you need to feel confident about our partnership, with the knowledge you can jump back in any time. If you have questions about this ebook, co-design, or simply want to talk with another person about your ideas, feel free to reach out to us with the information below!

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