

**Teen Audio Jam:
Exploring Creativity and Collaboration in the Library**

Team #3
Sungha Kang
Norah Murphy
Micaela Duran

17 March 2024

Problem Statement

In public library settings, youth services must cater to a diverse range of age groups, each characterized by their unique interests and developmental stages. It is imperative that teenagers are not an overlooked demographic and that their needs are fully taken into consideration with our programming efforts. However, in order to best serve teens, we must overcome the common barriers preventing them from using the library: unappealing socializing spaces, negative associations with the library, and lack of information about library services (Lee, 2014). In addition, teens can feel unwelcome in the library due to negative interactions with librarians; often, they are heavily policed for their behavior and asked to leave the library if they are being too boisterous (Campos, 2020). These barriers inherently limit our interactions with teenagers and make our full range of resources inaccessible to them. Rather than further isolating teens from the physical library spaces, how can we foster an environment where they feel like their voices can be heard?

Teens, who often already view the library as a restrictive study space, are less likely to engage with the library if we are unable to serve their interests. The Young Adult Library Services Association (YALSA) provides guidance for strengthening programming efforts directed towards teens. In regards to teen growth and development, they suggest that rather than focusing on providing a space for quiet study, it is important to embrace opportunities for further engagement with the library and connect teens to resources that aid their personal growth (Braun et al., 2014). In their recommendations for improving learning environments, YALSA suggests creating flexible educational settings where teens are encouraged to be creative in both individual and collaborative settings (Braun et al., 2017). Similarly, they advocate for learning experiences that focus on developing modern skillsets, such as digital literacy (Braun et al., 2017).

Guided by these insights, our design process was informed by the following questions: How can we effectively meet teens where they are and genuinely serve their interests? How can we create an environment where teens feel connected to the space, rather than perceiving it as boring, quiet, or restrictive? How might teens engage with the library in an enjoyable and generative way so that they see the library as a welcoming and creative space to develop their sense of curiosity?

Design Methodology

As a conceptual framework, Radical Change Theory (Fig. 1) advocates for the integration of technology in youth information resources. In order to develop future generations' digital literacy skills, youth services efforts should focus on dynamic learning experiences that prioritize patron autonomy, building community through these newfound literacies, and increased accessibility from overcoming information barriers (Dresang & Koh, 2009). With an emphasis on interactivity, connectivity, and access, our project fostered a collaborative environment where teens could develop skills to help build their confidence in navigating various technologies, softwares, and digital resources. By leveraging this methodology, we were able to break away from traditional paradigms of learning environments in the library and reimagine the space as a dynamic hub of creativity, learning, and community engagement.

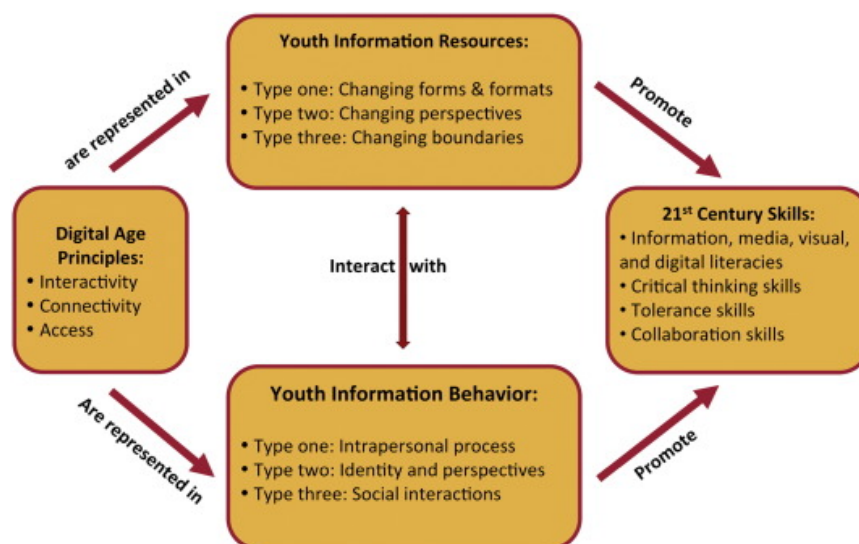


Figure 1. “Model of a Proposed Research Agenda Applying Radical Change Theory” (Dresang & Koh, p. 44, 2009).

Value Sensitive Design (VSD), the process of centering human values into the design process, was an integral methodology for our design process. As a part of the VSD process, we identified a value tension that placed two values “in opposition but allowed for solutions that balanced each value in relation to the others, such that the adjudication of the tension holds each value intact” (Friedman & Hendry, 2019). Due to our focus on a teenage age group, we were primarily concerned about the friction between the value of autonomy versus accountability. We wanted to ensure that we could cultivate an environment where teenagers felt empowered by their own decisions, but we were also concerned that a lack of structure would lead to the teenage patrons being unaccountable for producing generative work. Our understanding of this value tension shifted following our user testing. Initially, we were concerned that a program with too many rules or too much structure would turn teenagers away. However, during our interview process, our user expressed a desire for a structured environment in order to provide a sense of creative direction. Detailed in the following sections, this feedback ultimately prompted us to modify our approach to the design process, and helped us strike a balance between our two values.

Solution

Our approach to this problem resulted in a twofold solution: a dynamic, in-person programming series and an interactive installation to showcase teens’ creativity to the library community. We wanted to both give teens a space to create and show them that the library valued their creativity—and that their creativity could become a part of the library.

Our low-fidelity prototype (Fig. 2) represented a loosely conceptualized recurring event aimed at teenagers: they could come into the library at a regular time each week and find other teens involved in creative, audio-centric pursuits at a designated workstation, while utilizing the library’s range of audio production and editing equipment. We also planned to have broad creativity-sparking prompts available at the workstation, to encourage brainstorming without imposing restrictions on teens’ creative processes.



Figure 2. Teen Audio Jam low-fidelity prototype

This low-fidelity prototype prioritized teens' autonomy and agency in their creative process, in accordance with the values we identified in our value-sensitive design process. The creative prompts, weekly structure, and clearly-defined audio-storytelling focus of the program helped support the library's accountability to the teens, their parents, and their growth. Additionally, this prototype featured an interactive installation designed to showcase the program participants' work: a set of headphones attached to a console near the front of the library, where users could listen to a selection of audio clips submitted by teenage program participants.

Our high-fidelity prototype for an Audio Jam incorporated feedback from our user testing, and as such, we feel it better addresses our problem. In addition to showing a more detailed layout of the space and interactive installation, we also created promotional materials for the program, to give potential users a more fully-developed sense of the program experience.

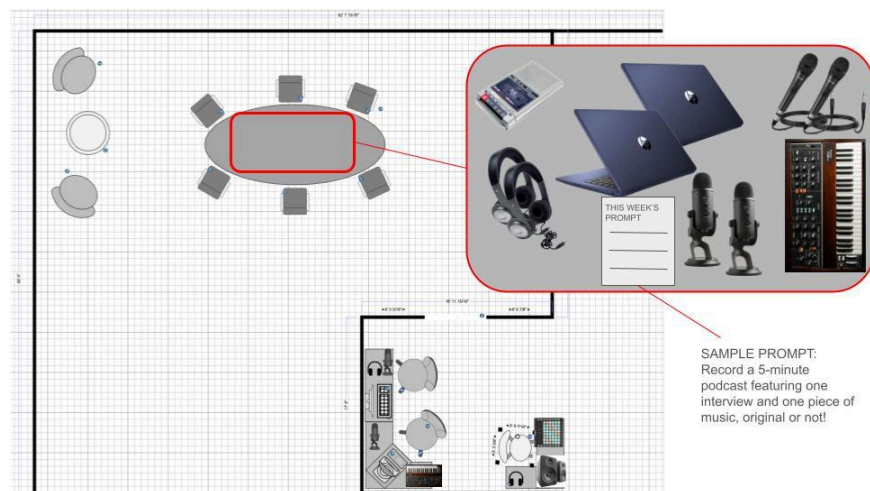


Figure 3. High fidelity prototype, workspace layout.

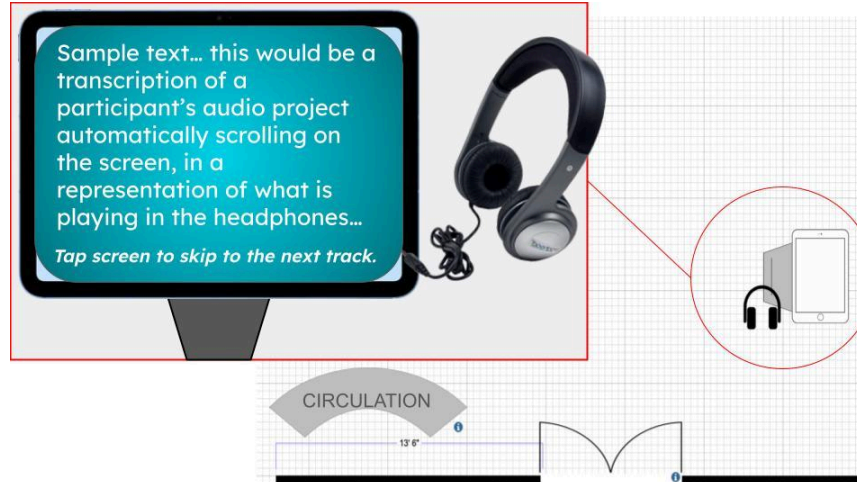


Figure 4. High fidelity prototype, installation.

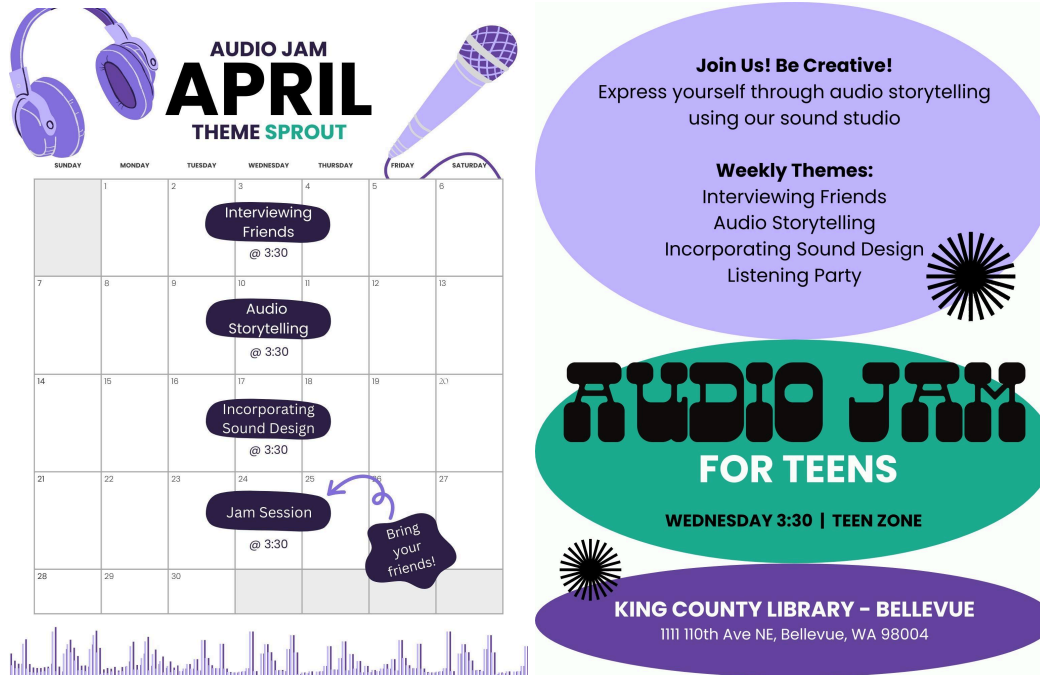


Figure 5. High fidelity prototype, themed sample calendar and poster

In the physical space component of the prototype (Fig. 3), we depicted a large conference table, located adjacent to the library's recording studio, as our main workspace. The recording studio itself is outfitted with computers with open-source audio editing and production software, as well as microphones, drum pads, and synthesizers. At the workspace outside the recording studio, we have laptops, podcast and handheld-style microphones, a synthesizer, headphones, print-outs of that week's prompt, and a cassette recorder. The addition of the cassette recorder was prompted by user testing; our user expressed excitement at the prospect, and we thought the defunct nature of the equipment would make it inexpensive for the library to access, while adding novelty and creating a more tactile, take-home experience for participants.

The printed materials included in our high-fidelity prototype further detail the shape of this program (Fig. 5). Each month, there is a different theme—a broad term with many potential associations that can spark ideas in the participants. We chose “Sprout” as our prototype theme. The first three weeks of the program will have a different, more practical focus on developing teens’ skill sets: learning to use audio equipment by interviewing one another, creating a structured storytelling narrative, and incorporating sound design with editing software. During each session, a youth services librarian guides participants through the day’s activity and offers support in using the equipment as needed. Otherwise, each session is largely participant-led. While we still wanted to offer teens creative autonomy during each section, the program has more structure overall—which we feel strikes a balance between autonomy and accountability.

The final week of each month is a “Jam Session,” where teens can bring their friends and show off what they’ve made in the previous weeks. We still incorporated an interactive installation into our high-fidelity prototype because we believe that is an important feature that makes teens feel connected to the library as a physical space (Fig. 4). However, we modified the console to add a visual element (as suggested by our user). It consists of a tablet mounted on a stand, playing an endless, visually engaging scroll of transcripts of the teens’ audio projects. The transcript visual helps draw in users, and when users put on the headphones, they hear what is transcribed on the screen.

This balance of instructor-led guidance, unstructured work time, and group sharing incorporates the feedback we received in our user testing while maintaining focus on the problem we identified: how do we foster an environment within the library where teens feel their voices are being heard? Our Audio Jam program encourages creativity in a supportive, loosely structured environment that creates opportunities for teens to share their ideas.

Evaluation

Our user testing experience was essential in helping us refine our low-fidelity prototype. Our user testing participant, a 17-year-old nonbinary teenager living in Massachusetts, is an active library user with an interest in creative pursuits. Based on their responses to our questions, we tried to make sure our prototype was fully welcoming and engaging for teens. Prior to the testing session, we carefully designed a set of user tasks to evaluate different aspects of the proposed program. These tasks were tailored to elicit feedback on the program’s appeal, usability, and potential for teen engagement. During the session, the participant engaged with our low-fidelity prototype and completed the assigned user tasks. These tasks included exploring proposed installations, providing feedback on their effectiveness in attracting attention and encouraging participation, and suggesting potential improvements or alternatives. The entire process was conducted in an interview format, and open-ended and closed-ended questions were repeatedly used to elicit participants’ autonomous answers as much as possible.

Through feedback gathered from the participant, we gained valuable insight into the strengths and weaknesses of our initial plans. In particular, the feedback revealed where our prototype fell short in fully welcoming and engaging teens. Our user felt our proposed installation was unsatisfying; in their eyes, it was not given that much importance, and was just “this thing that is over there.” In contrast, our user suggested a listening party, and wondered if more specific, but still open-ended prompts might be more satisfying and generative. This led us to reevaluate our approach and explore adjustments to better address the issues identified.

Taking into account the feedback received, a high-fidelity prototype was developed to incorporate participants’ suggestions and address shortcomings of the initial concept. This iterative process allowed us to see that the elements of the program that we thought would be beneficial to youth did not fully address the actual needs or preferences of youth. The iterative process also helped us identify which aspects needed more emphasis and directions for improvement of the project. Additionally, the positive feedback provided allowed us to confirm the validity of certain design elements (e.g. positive feedback on interactive installations). This ensures that our design decisions are in the right direction while also

allowing us to allocate more resources or attention to those areas to maximize the effectiveness of the program.

Overall, the iterative design process including user testing provided valuable feedback that helped us improve high-fidelity prototype. By actively involving users in the design process and responding to their feedback, we were able to create a program that better aligned with the interests and preferences of teenagers in a library environment.

Limitations

Although our proposed design has the potential to engage teens in library programming, it is essential to acknowledge and address its inherent limitations to ensure applicability in a variety of contexts. One of the important constraints is resource availability. The success of the program depends heavily on access to essential resources, including audio production and editing equipment, and sufficient funding to maintain operations. The limited availability of these resources can create difficulties in establishing and maintaining programs and potentially hinder their long-term viability. These challenges can also be exacerbated by the technical complexities associated with setting up and managing audio equipment, which may require additional resources and specialized expertise from librarians for effective implementation.

Moreover, the project's appeal may be limited to teenagers with a special interest in storytelling or audio production. These individuals may find the program relevant to their interests, but others with different preferences may not be willing to participate. These limitations highlight the need to further explore a variety of programming options that cater to a broader range of teens' interests, thereby maximizing the reach and impact of programs within the target demographic. Furthermore, the user testing phase of our design was limited by our small sample size of only one participant. Although valuable insights were gained from the participant, the limited representation of the diverse perspectives and experiences of teenagers may raise questions about the generalizability of the feedback received.

Scaling up a program to reach a wider audience can also be challenging, especially due to budget constraints. Expanding the program's reach and impact will require significant financial investment to support infrastructure improvements, including upgrading audio equipment and strengthening digital platforms for sharing audio projects. To overcome these budgetary barriers and promote program growth and sustainability over time, securing long-term funding solutions, such as grants (e.g. Seattle Youth Arts Grant) and partnerships with external organizations, is essential. By proactively addressing resource constraints, diversifying programming options, conducting comprehensive user research, and securing long-term funding solutions, we will be able to overcome these challenges and develop programs that meet the needs and interests of teens in our community.

Reflection

Our main takeaway from this project was the value of the iterative nature of the design process. While there was no single large challenge we faced during the project, we overcame a number of small hurdles, often related to disconnect between our solution and the user, or our solution and the stated problem. The iterative design process helped guide us through these challenges, as oftentimes we just needed to reframe our perspective, discuss the problem in a new way, and slightly modify our original plan.

Formalizing our ideas through prototyping was occasionally challenging, especially as we were not necessarily creating a physical object. Still, being forced to concretely represent our abstract program idea was ultimately very beneficial. Sketching out a design and guiding a third party through our idea helped us come face-to-face with any logic gaps and idiosyncrasies in the program we had developed. Though we were constantly thinking of the intended user, sometimes the teenage user in our minds had very different needs and behaviors from the actual teenager we talked to during user testing.

The setting of a library offered constraints that were ultimately helpful to our creative process, though they initially felt limiting. We were forced to contend with our own preconceptions of the sorts of activities that could take place in a library, and the types of interactions that could occur. Sometimes, these preconceptions prevented us from working towards the best solution—we assumed that teens would respond in a certain way, or library users would respond to our installation in a certain way, and thus wrote off an alternative path. However, this wasn't necessarily the case: as we learned through user testing, our assumptions about teenagers' behaviors in libraries were not always correct. As such, it was satisfying to be able to reconceptualize the sorts of programming that could take place in a library, and the ways that library resources could be utilized.

While directing teenage library users to audio production equipment is not necessarily a groundbreaking library program, the process of coming to our solution helped us think more creatively about the ways that existing library resources can be used to address different kinds of problems. Our problem statement addressed creativity and connection in teens, and by harnessing our own creativity and being willing to adapt, we were able to identify an adaptable solution within an environment that some teenage users might initially perceive as restrictive.

Bibliography

- Braun, L., Dahlen, S. P., Davis, V., Hartman, M., Hughes-Hassell, S., Irwin, V., Martin, C., Salem-Poling, L., Wyatt, E., & Young Adult Library Services Association. (2017). *TEEN SERVICES COMPETENCIES FOR LIBRARY STAFF*.
https://www.ala.org/yalsa/sites/ala.org.yalsa/files/content/YALSA_TeenCompetencies_web_Final.pdf
- Braun, L. W., Hartman, M. L., Hughes-Hassell, S., Kumasi, K., YALSA, & U.S. Institute of Museum and Library Services. (2014). *The Future of Library Services for and with Teens: A Call to Action*.
https://alair.ala.org/bitstream/handle/11213/15083/YALSA_nationalforum_Final_web_0.pdf?sequence=1
- Campos, L. (2020). Eliminating Barriers: Building Stronger Relationships with Teen Library Patrons. *The Serials Librarian*, 79(1–2), 49–56. <https://doi.org/10.1080/0361526x.2020.1772172>
- Dresang, E. T., & Koh, K. (2009). *Radical Change Theory, Youth Information Behavior, and School Libraries*. <https://www.ideals.illinois.edu/items/15318>
- Friedman, B., & Hendry, D. G. (2019). *Value sensitive design : shaping technology with moral imagination* (pp. 1–11). <https://ci.nii.ac.jp/ncid/BB28979337>
- Lee, S. (2014, May 5). *Beyond books, nooks, and dirty looks: The history and evolution of library services to teens in the United States*. *The Journal of Research on Libraries and Young Adults*.
<https://www.yalsa.ala.org/jrly/2014/05/beyond-books-nooks-and-dirty-looks-the-history-and-evolution-of-library-services-to-teens-in-the-united-states/>