Developing Inclusive Technology to Make Your Library More Accessible for the Autistic Community

Ms. Jamie Mercer, Head of Youth Services and Ms. Katie Hench, CEO of InfiniTeach

W.J. Niederkorn Library and InfiniTeach

Introduction

No matter how small your library is, your library can absolutely be more accessible to the autistic community, including developing inclusive technology such as a Sensory App.

The W.J. Niederkorn Library is a small library that borders suburban and rural communities in Wisconsin. Our library is a two storied building with the children's department on the lower level and the adult and teen departments, as well as the computer lab, on the upper level. On average the library sees 91 patrons a day in the children's department and 154 patrons a day on the upper level in the adult and teen departments.

As far programming goes, on average the library draws 359 visitors a month to our children's programs, 89 teens to our young adult programs, and 188 adults to our adult programs. These statistics do not include passive programs.

When one looks at the numbers, one might ask then, with a library and user base so small, with limited staffing, why would the library take on a project such as working with InfiniTeach to develop an app and to increase Sensory programming?

It was the W.J. Niederkorn Children's Department that saw a need not only for the programming but for the app. Looking at the community and looking at the schools' state report cards, staff members knew there were many families in the school district that had children on the spectrum, but they were not seeing this reflected at library programs or patron visits.

And so staff began by offering Sensory Storytimes (best practices were researched) and advertised to the school district. It was a slow start at first. But as families began to come and give feedback, it became apparent that more resources were needed, including an inclusive app.

Methodology

Our Process and Partnership: The need to expand our inclusive programming at W.J. Niederkorn perfectly aligned with the mission of InfiniTeach, which is to **empower the autistic community** in engaging with their communities. InfiniTeach's app solution combines our library content with best practice autism strategies and resources into a single mobile app. Once developed, library patrons and staff can **download the app for free from the App Store and Google Play.** It seemed like an intuitive, impactful way to continue expanding our inclusion resources. From day one, it was obvious that accomplishing our mutual mission was going to be an equal partnership. We worked together to identify funding opportunities, share best practice strategies, gather assets, and develop content. Each of those critical steps are further outlined below.

Identifying Funding: For smaller institutions like ours, InfiniTeach offers a reduced rate for technology development. For $5,000, our staff was able to partner with InfiniTeach to develop our mobile app. InfiniTeach was able to share with us a list of possible grant opportunities in our area that appeared to be a good match as far as funding for the mobile app development. The grant our institution applied for and received was the **2021-2022 SPARKS: Building Community Connections Grant offered by the Wisconsin Board for People with Developmental Disabilities.** Applications were released in July of 2021, due by early September 2021 with the review process completed by late September 2021. All grantees then attended a mandatory kickoff in early October of 2021, which also began the start date of the grant contract.

The SPARKS grant and our project were a great fit. The purpose of the SPARKS grant perfectly aligned with our institution's goals of increasing our sensory programming and providing people with disabilities more social connections by participating in our inclusive, meaningful community programs. With the app development, we are also giving the autistic community a tool in which to prepare for visiting the library and resources to be able to fully engage during visits and programs. The app made the library more accessible through social narratives, a tap to talk communication feature, a visual schedule feature and more.

Project Kick-Off and Cadence: With funding secured, we were able to begin the process of developing the app. We established a monthly check-in schedule, with the plan to cover a different feature within the app each month. The overall process took 6 months from kick-off to app launch.

Sharing Best Practice Strategies: During the monthly check-in calls, the InfiniTeach team and W.J. Neiderkorn's Head of Youth Services, Jamie Mercer, would discuss a specific feature of the app. InfiniTeach would lead the discussion describing the **evidence-based solution** that was being utilized in that specific feature and provide additional resources to learn more. Then we would discuss the assets and content that were needed for that feature. Following our call, Jamie and the InfiniTeach team would complete that feature. It was a great opportunity to learn about best practice autism teaching strategies and then practice using those strategies to develop content relevant to our library. This **process has continued to help our inclusion efforts** as the strategies that were shared can also be used to support patrons and staff in many other situations.

Gathering Assets: Mobile apps, in general, are a very visual medium for sharing information. Many of our favorite apps rely heavily on video, photos, and other images to share information. Using specific types of visual supports, such as picture schedules and checklists, is an evidence-based intervention that can support autistic individuals with information processing. In our app, we collected images of each part of the library experience, from parking and entering to finding books and checking out. We also gathered images of important areas in the library, such as the restrooms, and important people you might meet, like us librarians! All of these images were shared in the app, providing visual tools to support visitors.

Developing and Adding Content to the App: In addition to teaching about the evidence-based strategies used in the app, InfiniTeach also taught W.J. Niederkorn staff how to add content to the app using a web-based Content Management System (CMS).
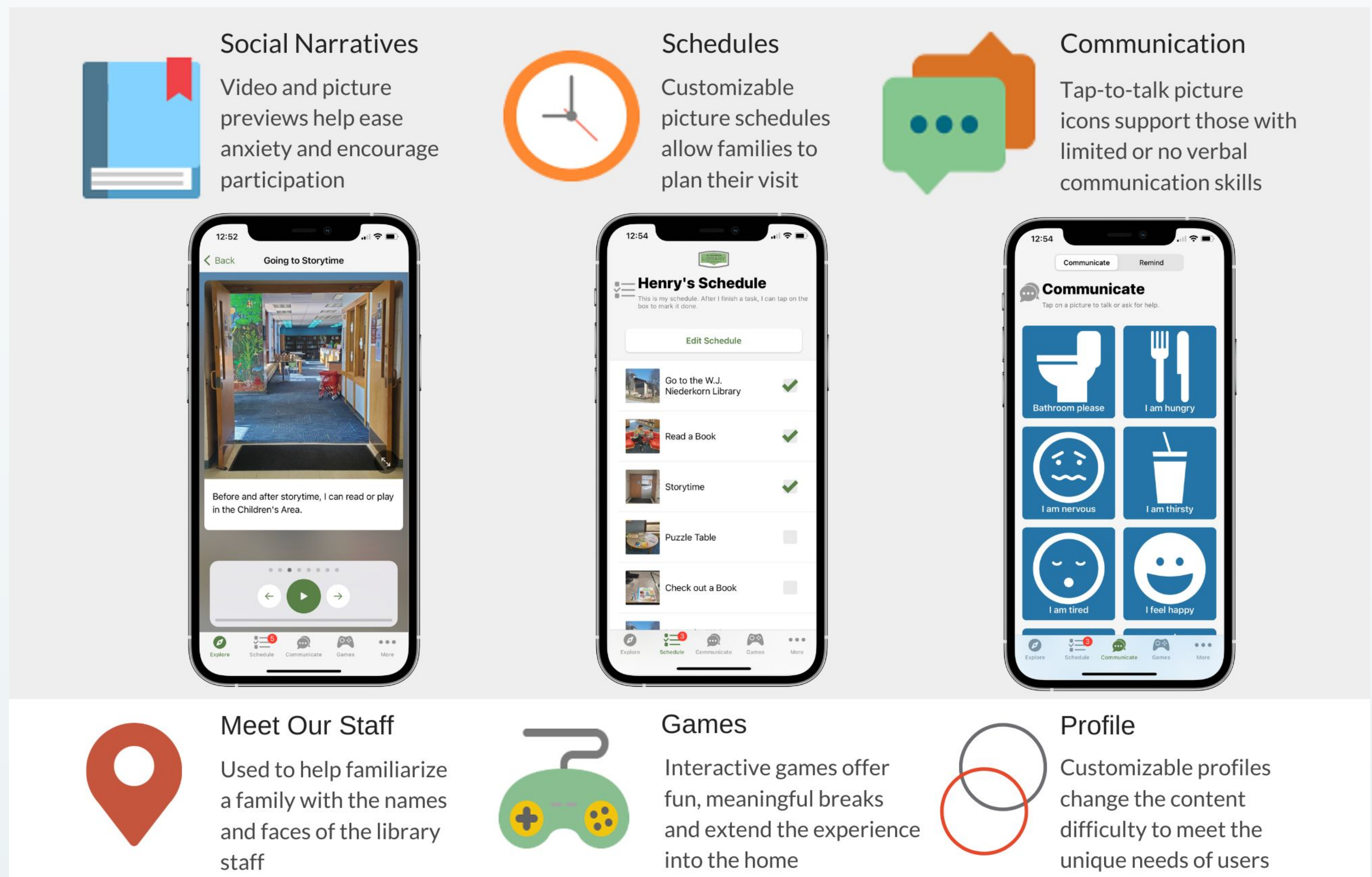
The CMS was developed to be intuitive for use by app administrators who do not have a background in programming or coding. The content is copied and pasted into the website and images are uploaded from the computer.

Updated content on the CMS is also **updated in the mobile app in real-time,** so library patrons can be notified immediately of any changes. While 90% of the content in the app is evergreen, it is a convenient and helpful option to be able to update information on programming and events that are happening at the library.
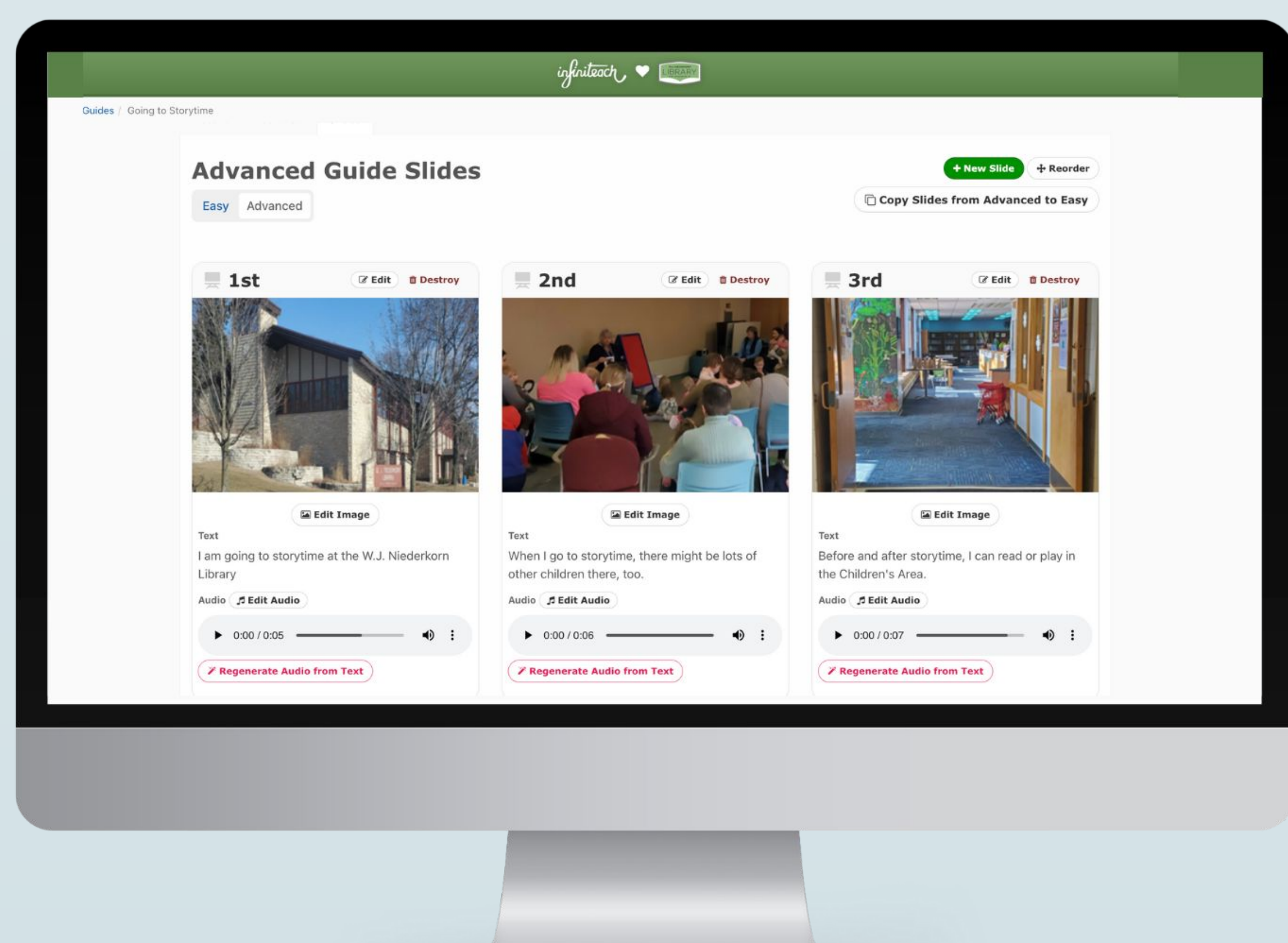
Results

App Launched June 2022: The result of our effort was the development and launch of Sensory WJN, a mobile app that is available to download for free on the App Store and Google Play. The main features of the app include: Social Narratives, Schedules, Communication Supports, Meet Our Staff, Games, and a Customizable Profile.

Social Narratives — Video and picture previews help ease anxiety and encourage participation

Schedules — Customizable picture schedules allow families to plan their visit

Communication — Tap-to-talk picture icons support those with limited or no verbal communication skills

Meet Our Staff — Used to help familiarize a family with the names and faces of the library staff

Games — Interactive games offer fun, meaningful breaks and extend the experience into the home

Profile — Customizable profiles change the content difficulty to meet the unique needs of users

Pilot Year Results: In the first year of piloting the app, we had 86 users download the app. We tracked monthly app usage, and found that we had over 50% of families use the app more than once (returning users: gray bars).
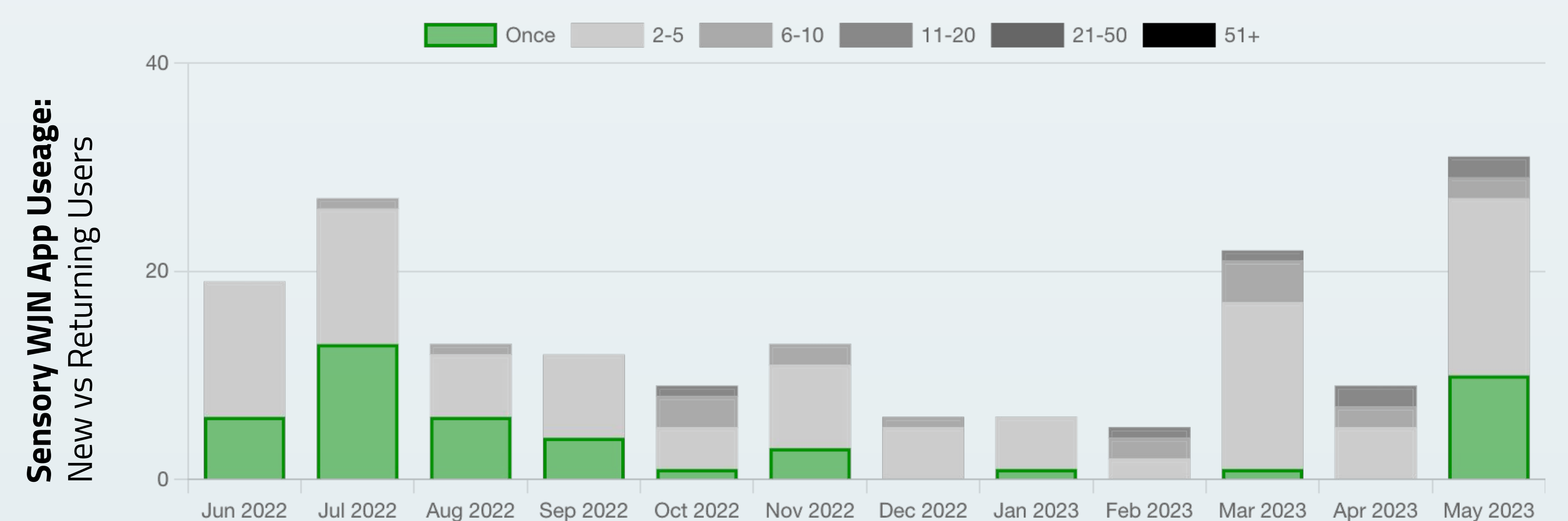
Family Feedback: In an interview with a caregiver who attends our Sensory Storytimes, they stated "When my son was young enough to come to storytimes here, we came once. My son is on the spectrum. He's almost 40 now. Anyway, the librarian at that time asked us to leave and not come back. There has been a history here and some families did not feel welcome coming. Now, as a babysitter, I am happy that I can bring the kids I watch **without fear of judgement,** knowing that the librarian has some knowledge of autism. I don't have to worry about being asked to leave if a child I'm watching is hand flapping or has to get up to jump or clap. **Everyone is welcome.** And I am glad that an effort is being made to not only welcome families, but also to assist them in their visits."

Conclusion

In conclusion, because it is evident that there is a need for programming, as well as the app, our library has now created a line for the app and for sensory program supplies in our annual budget.

InfiniTeach has been amazing to work with in that they are so committed to their work and improving accessibility for the autistic community in any setting. Realizing that we are a smaller library and wanting us to succeed, as well as wanting other small and rural libraries similar to ours, to be accessible, InfiniTeach has provided critical discounts and support to make this possible.

In regard to continued marketing, InfiniTeach is supporting us in developing new marketing materials for outreach to schools and community-based organizations. Likewise, we keep abreast of new developments, organizations, and programs within our county to continue to build partnerships.

Finally, we continue to read current research with regard to autism, research regarding best practices in programming for the autistic community in the library setting, as well as speak with families and patrons, so that we can continue to offer expanded programs and resources that improve access to the library for the autistic community.

Sensory WJN — Available on the App Store / Google Play

Download Sensory WJN for free

An app to make WJN Library accessible for the autism & neurodiverse communities:
- Preview videos
- Customizable Schedule
- Communication Icons
- Meet Our Staff, and so much more!

Sample postcard to be handed out in the library, to schools, and at community events. Includes a QR code for downloading the Sensory WJN app.

Acknowledgements