



Better Together: Neurodiverse Community Members Partner with TWU Students to Conduct Autism Accessibility Audits

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Why This Matters

Community participation is an important aspect of life for everyone, including people identified as having autism spectrum disorder.

Successfully being able to engage in and enjoy community-based activities is impacted by a variety of barriers including sensory, social, and communication factors in the environment.

Who We Are

Four TWU occupational therapy students partnered with five neurodiverse crew members from nonPareil (nP) Institute to complete autism-accessibility audits at community venues.

Comments From nP Members

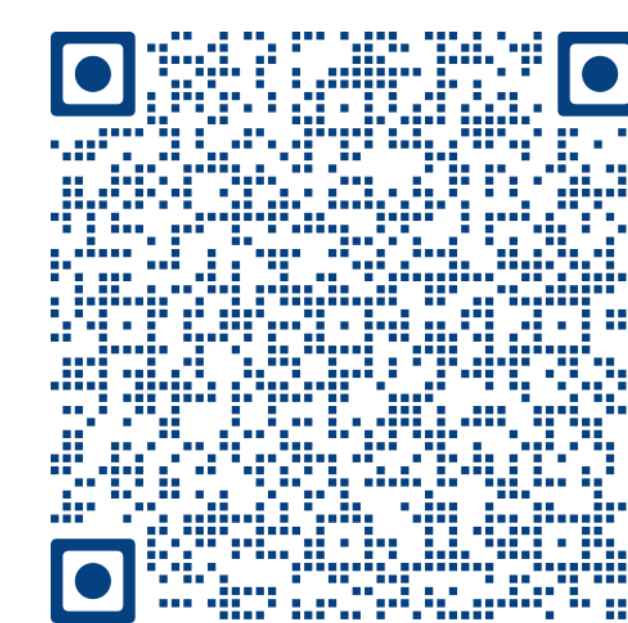
“It has really good acoustics, but it also makes things reverberate.”

“I do wish there were some pictures to go along with the menu.”

“I would appreciate a label out here before the hallway to the restrooms rather than having to go into the hallway where it is.”

What We Do

Auditors use a Google form with neutral statements about sensory, communication, and social factors with drop down menu options to agree/disagree.



Scan for an example of a Google form used in an audit.

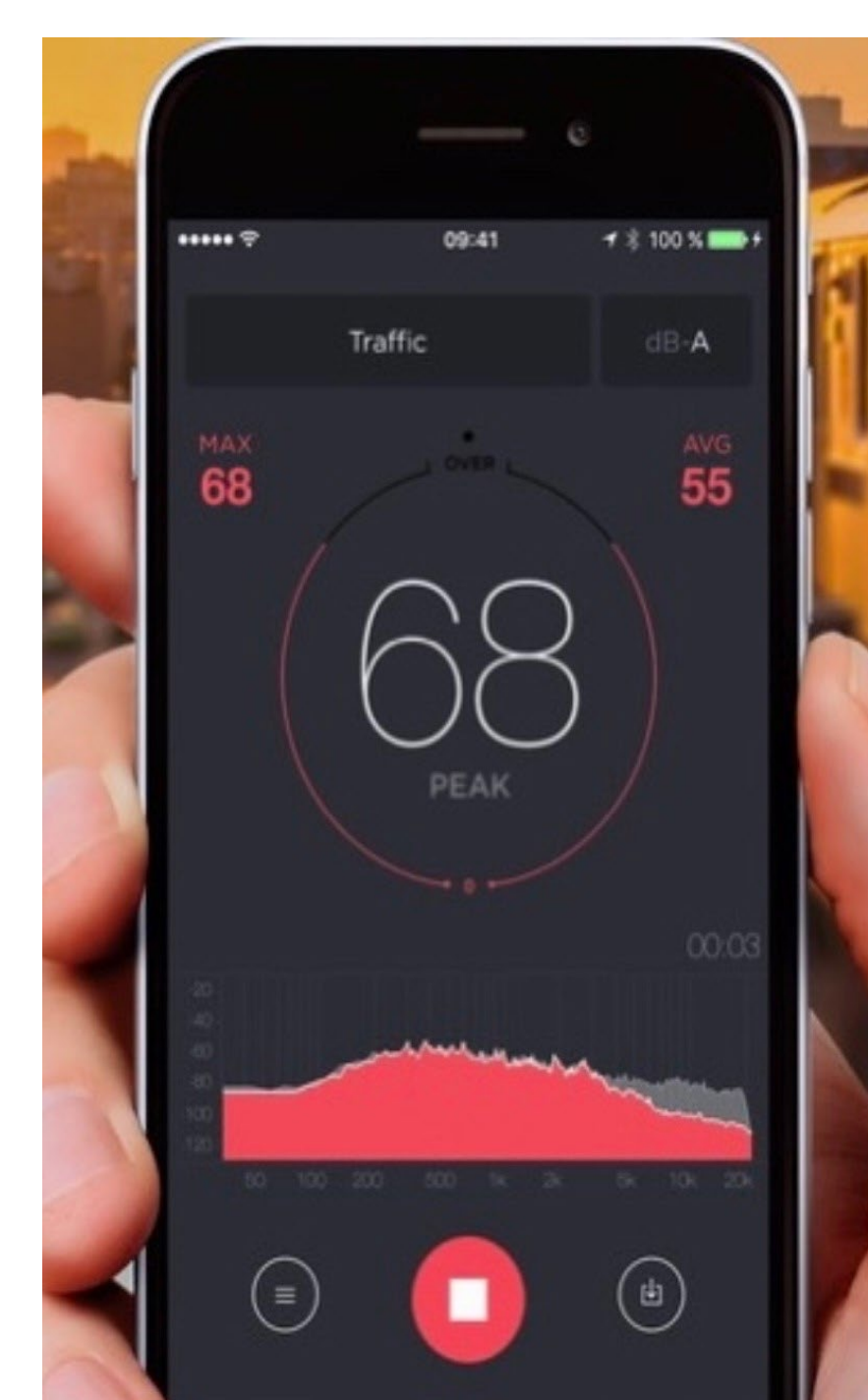
It takes 30 minutes to independently evaluate the environment, then up to 30-60 minutes for group reporting.

What We Use

Light Meter



Decibel Reader



Researchers retrieve data from:

- Responses from audits
- Information from websites
- Social media platforms
- Observations
- Transcriptions of work sessions for auditor comments

A Portion of an Audit Report

Factors that are not modifiable but people should be aware about:

- Least busy times are Monday-Friday after 5pm
- Most busy times are Monday- Friday from 8-11am and Saturday after 1pm
- Store is closed on Sundays
- There is one restroom area for females with 2 stalls and one single family restroom
- Sound levels
 - 78 dB from the coffee making appliances (similar to noise of busy downtown traffic)
 - Average sound levels vary from 60- 75 dB with music, conversation, and coffee machines (ranges from sound level of a normal conversation between two people to sound level of vacuum cleaner)

Area of Observation

Noise

- Current Situation
 - See above for specific sound levels
 - Sounds from machines, people's voices, and background music vary from sound level of normal conversation between people to sound level from downtown traffic
 - Sounds from barista's machines provide the loudest noise observed
 - There is music played over the speakers on the ceiling throughout the store
 - Sound levels are higher in the front of the building in comparison to the back of the building
- Possible Solution
 - For individuals with sound sensitivity, provide noise-reducing headphones or Earplugs at the entrance of the shop as an option to reduce sound levels
 - To decrease sound levels in the environment
 - Add small rugs on the ground
 - Add acoustic panels under the chairs
 - Add acoustic art panels on the walls
 - To decrease amount of sound sources, create a time interval each day in which music is not played over the speakers

Our Reports

The team developed a report template to ensure efficient time spent on each audit. The team selects suggested modifications from a choice pool to complete the audit. The team includes hyperlinks to direct readers to pictures, strategies, and resources.

For community members:

Strengths of the environment and suggested modifications plus resources and guidelines.

For individuals with autism:

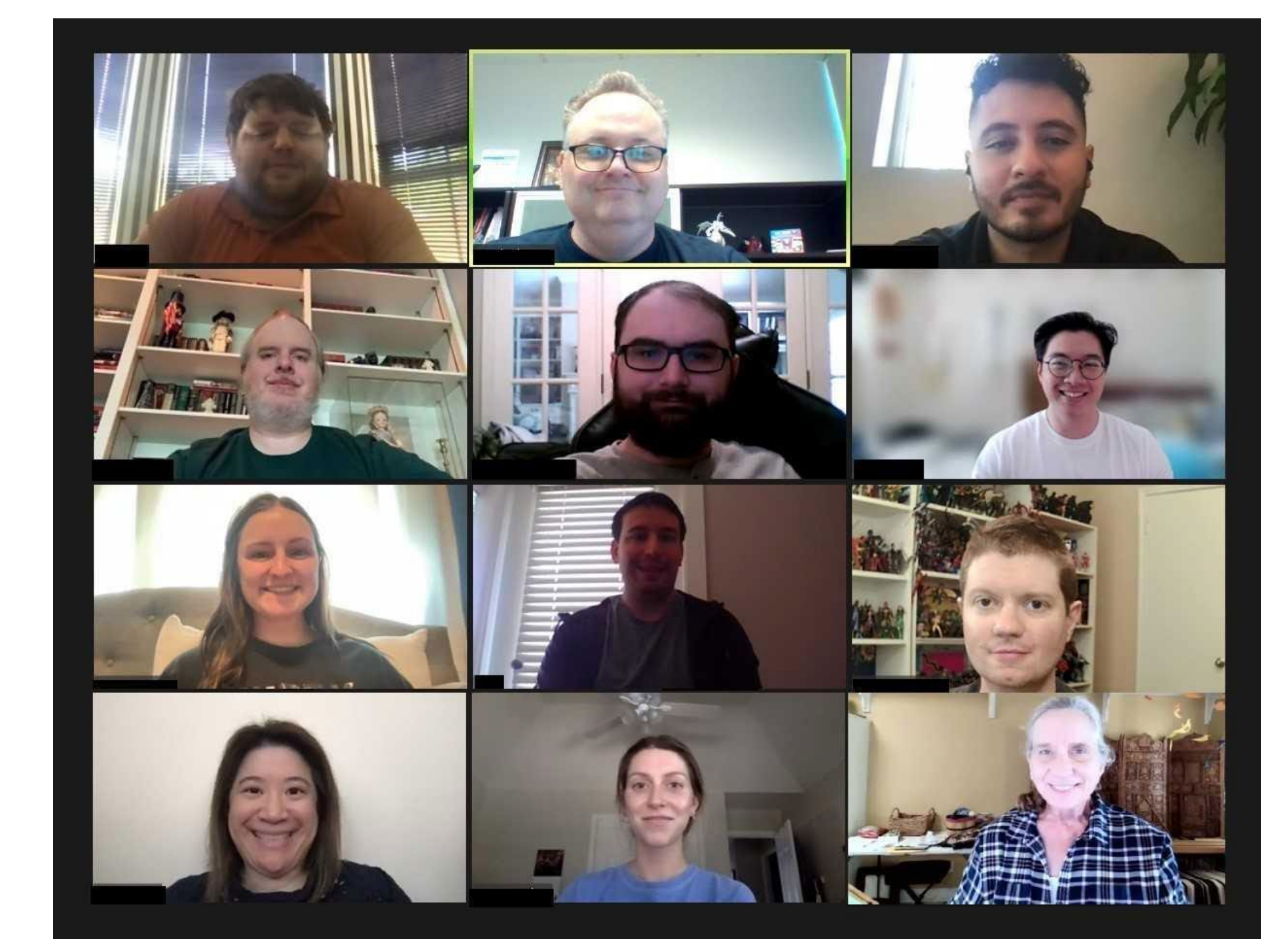
A quick reference guide including good-to- know facts, statements from nP members, and ways to prepare for visits.

Next Steps

Environmental audits can be beneficial to everyone, not just those with autism.

More education and awareness on the needs of people with autism can promote inclusion and improve the community participation experience.

Auditing could become a business run by autistic community members.



References and Resources

Chien, C. W., Rodger, S., Copley, J., Branjerdporn, G., & Taggart, C. (2016). Sensory processing and its relationship with children's daily life participation. *Physical & Occupational Therapy in Pediatrics*, 36(1), 73-87. <https://doi.org/10.3109/01942368.2015.1040573>

Fletcher, T., Anderson-Seidens, J., Wagner, H., Linyard, M., & Nicolette, E. (2019). Caregivers' perceptions of barriers and supports for children with sensory processing disorders. *Australian Occupational Therapy Journal*, 66(5), 617-626. <https://doi.org/10.1111/1440-1630.12601>