

# Tips for Accessibility, Inclusion, and Engagement in Museums and Planetariums

---

The Americans with Disabilities Act (ADA) of 1990 is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to everyone. The purpose of the law is to make sure that people with disabilities have the same rights and opportunities as everyone else. While substantial progress has been made in the museum field, there are miles to go until every single visitor, no matter their abilities, enters a museum and leaves feeling like they were engaged in a meaningful way.

As the facilitator of activity you can try your best to anticipate the needs of a variety of participants. The following are some key ways to think about welcoming strategies and accommodations you can provide for visitors with different disabilities and learning styles.

## **Mobility Access**

Is the activity physically accessible to a person using a mobility enhancement such as an electric scooter, wheelchair, walker, crutch or cane? Does the activity require coloring, drawing or writing?

*Accommodations:* If the activity is placed on a table, be sure a wheelchair can fit underneath the table. Have a couple of folding chairs available for people who need to sit. Provide pencil grips for people who have difficulty holding pencils, pens and crayons.

## **Blind and Low-vision Access**

Is the activity primarily visual, such as looking at a picture with binoculars or a telescope and identifying objects or describing observations?

*Accommodations:* People who are blind can participate in visual activities by using tactile materials, such as a touchable image (for example, a tactile picture in the Touch the Stars book), a hands-on model, along with a pictorial description of the image. Rather than hand a person a tactile image and say, “guess what this is?”, instead ask the person “would you like to see a tactile image?” and then explain that you have placed the tactile image on the table. Describe the image as the person scans the image with their fingertips, and answer any questions. A person who has low vision may be able to see a visual image if it has high color contrast and/or with optical aid. If the activity involves looking at a picture, provide a magnifying glass as a possible accommodation.

## **Intellectual Disabilities and Neurological Access**

Does the activity require multiple steps or can it be done in a simplified version? Does the activity require sounds or can it be set up in a quiet location with no fluorescent (including flickering) lights? Can the activity be started and completed after a “break” if needed?

*Accommodations:* When needed, assist the participant’s progress through required steps and/or provide an abbreviated version of the activity. For example, if the activity requires multiple components to be connected, ask the participant if they would like you to help or have a version that is partly completed and needs fewer completion steps by the participant.

Some people on the autism spectrum may have difficulty initiating or responding to social interactions. They may feel overwhelmed in unfamiliar places or in exploring new activities. A “pilot’s checklist” or “run through” may help; you can explain and demonstrate what the activity is and offer step-by-step verbal and written instructions. If the person is wearing a headset, background stimulation (lights and sounds) may be overwhelming. Offer the option of completing part of the activity, taking a break and returning to continue the activity.

## **Deaf and Hearing Impaired Access**

Does the activity require a response to sound? Can the activity be completed with written instructions?

*Accommodations:* Provide a printed description of the activity including any needed instructions, and a method of non-verbal communication. Have a communication method available, such a paper and pen or you could use a cell phone, tablet or computer to display questions and answers.

## **Other Assistive Technology for Communication**

Be aware some people may use personal assistive technology. For example, some people who do not have hearing loss may be non-verbal and use a different (augmentative and alternative) method of communicating such as pointing to words or symbols on a chart or use the speech function on a tablet to communicate verbally.

## **Learn More**

To learn more about accessibility and inclusion in astronomy education see [Everyone’s Universe](#) by Noreen Grice. The book includes more details about the tips outlines above, a selection of case studies from museums and planetariums from around the country, and a list of accessibility resources and vendors.

Developed and distributed by the National Informal STEM Education Network.

These recommendations were co-developed with Noreen Grice. Copyright 2020, Sciencenter. Published under a Creative Commons Attribution-Noncommercial-ShareAlike license: <http://creativecommons.org/licenses/by-nc-sa/3.0/us/>

This material is based on work supported by NASA under cooperative agreement award number NNX16AC67A. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).