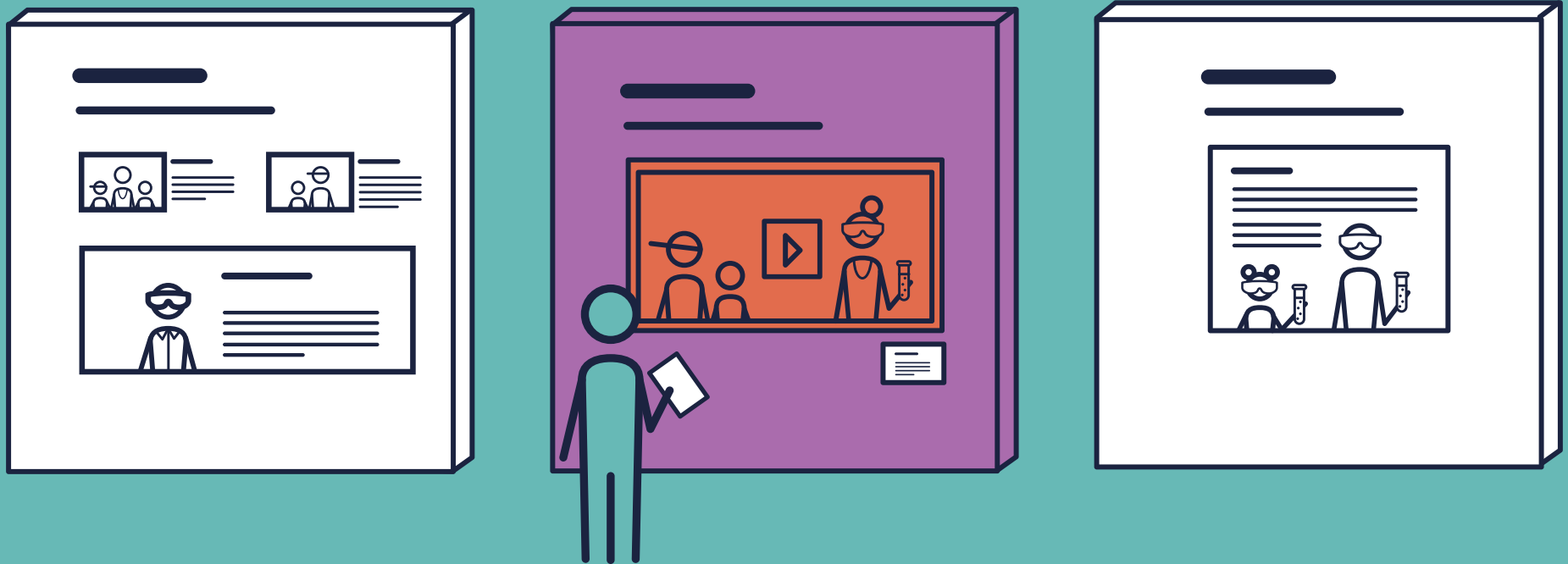


# THE IF/THEN<sup>®</sup> GENDER REPRESENTATION TOOLKIT



**ASTC** Association of Science and Technology Centers

in partnership with **IF/THEN**<sup>®</sup>

# TABLE OF CONTENTS

## 3 About our Team

## 4 About the Toolkit

## 5 Overview of Process for Toolkit Coordinator

## 6 Staff Sessions

## 7 How to Use the Assessment Tool:

7 Defining locations

8 Glossary

9 Rules and tips

## 10 Filling Out the Assessment Tool

## 11 Assessment Tool

## 12 Notes

## 13 After Using the Tool

## 14 FAQ

## 15 Additional Resources

## GOALS OF THE TOOLKIT

- Help science centers and museums collect data on their visual representation of gender
- Contribute to a field-wide understanding of how science centers are representing gender to identify areas of improvement and better determine the resources needed for growth
- Prompt conversations between museum staff about gender equity and support your organization's broader Diversity, Accessibility, Inclusion, and Equity efforts.

### BENEFITS FOR YOUR MUSEUM\*

- Receive up to \$500 after sharing resulting data with ASTC (limited to the first 100 museums, must apply online at [www.astc.org/ifthen](http://www.astc.org/ifthen));
- Receive a report of field-wide trends;
- Be eligible to apply for *IF/THEN*® grant funding by proposing a project that addresses gender equity in your museums;
- Join a nationwide peer network of science museums committed to gender equity through an ASTC Community of Practice; and
- Access the *IF/THEN*® Collection, a digital library of free photos and videos featuring inspiring women in STEM that ASTC members can use to increase their representation of women.

*\*While all organizations are encouraged to use this tool to address equity in gender representation, only U.S.-based ASTC member museums member museums are eligible for *IF/THEN*® grant programs and other financial support.*

## ABOUT OUR TEAM



### About the Association of Science and Technology Centers (ASTC)

Founded in 1973, ASTC is a network of nearly 700 science and technology centers and museums, and allied organizations, engaging more than 110 million people annually across North America and in almost 50 countries. With its members and partners, ASTC works towards a vision of increased understanding of—and engagement with—science and technology among all people.

[www.astc.org](http://www.astc.org)



### About The National Girls Collaborative Project (NGCP)

NGCP brings together organizations that are committed to informing and encouraging girls to pursue careers in STEM by maximizing access to shared resources, strengthening capacity of existing projects, and using the leverage of a network to create the tipping point for gender equity in STEM.

### In its role as an *IF/THEN*® Coalition Member, ASTC is:

- Compiling the data gathered from this assessment tool to better understand the state of gender representation in science museums
- Offering \$600,000 in *IF/THEN*® grants in amounts ranging from \$1,000–\$20,000 to help science museums make strides toward more equitable representation of women and gender minorities in their exhibits, program materials, and other content
- Working with the National Girls Collaborative Project (NGCP) to create the *IF/THEN*® Collection, a digital library of free photos and videos featuring inspiring women in STEM

For questions about this project, contact Amanda Fisher, Manager of Gender Equality Initiatives at [ifthen@astc.org](mailto:ifthen@astc.org)

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## IN PARTNERSHIP WITH:



### About the *IF/THEN*® Initiative

Launched in 2018 by Lyda Hill Philanthropies, the *IF/THEN*® Initiative aims to advance women in science, technology, engineering, and math (STEM) through three primary efforts: highlighting women working in these fields as role models, inspiring young women to learn about STEM careers, and convening cross-sector partnerships to illuminate the importance of STEM everywhere. The Coalition includes partners across industries—science, media, fashion, education, philanthropy, entertainment, sports, and more—undertaking projects to improve representation of women in STEM.



### About Lyda Hill Philanthropies

Lyda Hill Philanthropies encompasses the charitable giving for founder Lyda Hill and includes her foundation and personal philanthropy. The organization is committed to funding transformational advances in science and nature, empowering nonprofit organizations, and improving communities. Miss Hill has a fervent belief that “science is the answer” to many of life’s most challenging issues and has chosen to donate the entirety of her estate to philanthropy and scientific research.

# ABOUT THE TOOLKIT

## In this toolkit you will find

- An assessment tool to collect data on gender representation at your museum
- Guides for two planning, discussion, and debrief sessions designed for museum staff to complete before and after using the tool
- Rules and definitions on how to use the assessment tool, including a one-page guide for data collectors
- Additional resources including FAQ and suggestions for further reading

## Your team will need

- A **toolkit coordinator** responsible for recruiting data collectors, organizing training and discussion sessions for staff, and ensuring data is collected and reported.
- **Data collectors** will use the assessment tool in the spaces chosen by the toolkit coordinator. Staff members in any role and from any department may act as data collectors. You may choose to have as many data collectors participate as needed.
- A **data reporter** will gather data collection sheets from data collectors, enter them into a spreadsheet, and email data to [ifthen@astc.org](mailto:ifthen@astc.org).

## Time Commitment

The estimated number of hours for each step of the process is below. The amount of time needed will vary.

- **1–3 hours** for toolkit coordinator to prepare training sessions
- **2 hours** per data collector to attend training and discussion sessions
- **1–4 hours** per data collector to collect data using the tool
- **1–2 hours** for data reporter to enter resulting data into the spreadsheet

## Timeline

In order for your data to be considered in a field-wide report, please submit your results by April 30, 2021

## Why representation matters in science centers and museums

Women make up half of the total U.S. college-educated workforce, but only 28% of the science and engineering workforce. As community hubs engaging diverse audiences in science learning, science centers and museums have a part to play in ensuring that groups underrepresented in STEM fields are more visible. The images and videos displayed throughout science centers and museums have the potential to inspire community members who visit these spaces. Our hope is that all visitors will see themselves reflected in images used in museums and be motivated to consider education and careers in STEM fields.

“MUSEUMS PLAY SUCH A CRITICAL ROLE IN ATTRACTING AND EDUCATING KIDS THAT WE HAVE TO MAKE SURE THEY’RE TELLING THE STORIES AND HOLDING UP ROLE MODELS OF ALL PEOPLE WHO’VE BEEN INVOLVED IN THE STEM FIELDS...”

-Ellen Stofan

Director of Smithsonian’s National Air and Space Museum  
ASTC Dimensions, May/June 2018

# OVERVIEW OF PROCESS FOR TOOLKIT COORDINATORS

1

## **Review the Assessment Tool** (Page 11)

Including all accompanying resources within the toolkit

2

## **Decide where to use the tool**

i.e. exhibits, programs, websites, flyers, signage, etc

3

## **Determine additional categories to track** (if desired)

Learn more on page 9

4

## **Identify data collectors**

Data collectors may include staff or volunteers from education, evaluation, exhibits, marketing, or other areas of the museum

5

## **Coordinate Staff Session: Planning and Prep**

Learn more on page 6

6

## **Collect data**

Use the tool to collect data from the spaces you've decided on in step 2

7

## **Enter the collected data into the spreadsheet**

Data reporters will enter the data collection results into the spreadsheet found at [www.astc.org/ifthen-toolkit](http://www.astc.org/ifthen-toolkit)

8

## **Coordinate Staff Session: Debrief and Next Steps**

Learn more on page 13

## **Deciding where to use the tool**

Before getting started with the assessment, determine what categories of content you will analyze with the tool. You are not required to use the tool on every aspect of the museum's content: you may conduct your assessments on all content the museum creates, a few areas, or in a single space like a specific exhibit hall. If you are unsure about which areas should be the focus of the assessment, you can start with a cursory review of several spaces. How many spaces you are able to assess will depend largely on the size of your museum and number of data collectors. Use the tool to assess as many images and videos as you are able. Any amount of data that you collect is an important contribution.



### **Exhibits**

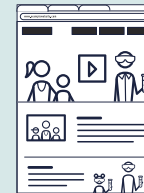
Includes permanent and traveling exhibits.

### **Museum Signage**

Includes any posted signs or displays located around the public areas of the museum

### **Program Materials**

Includes content from classes, workshops, demos, or any other educational materials outside of exhibits.



### **Web Presence**

Includes any websites your organization operates and social media pages.



### **Promotional Materials**

Includes flyers, catalogues, brochures, mailers, and other similar marketing materials.

## STAFF SESSIONS RECOMMENDATIONS FOR TOOLKIT COORDINATORS

At the end of this guide, you will find outlines for two in-person sessions for data collectors and museum staff. The toolkit coordinator may act as the facilitator of these sessions, or may choose another staff to lead them.

### STAFF SESSION: PLANNING AND PREP (APPENDIX A)

**Length:** 30–60 minutes

*Required* for all Data Collectors

Complete **before** collecting data

This training session helps data collectors understand how to effectively use the tool to collect data, and why the tool is needed. Before you hold this session, consider:

- What areas of the museum will you collect data from and in what order?
- Who will collect data from each space and when will they collect it?
- Will staff conduct assessments individually or as a team?
- What, if any, additional categories will you count using the tool? (See ideas on page 8)

### STAFF SESSION: DEBRIEF AND NEXT STEPS (APPENDIX B)

**Length:** 60–90 minutes

*Highly Suggested* for all Data Collectors and stakeholders

Complete **after** collecting data

This session focuses on individual reflection, including debriefing the experience of using the tool and discussing what was discovered. This session will also give staff an opportunity to explore potential next steps for your organization in addressing inequities discovered through using the tool. You may consider inviting additional stakeholders to this session, including staff from the areas you assessed, grant writers, and/or museum leadership.

### Keep in mind...

You know your own institution best, so feel free to tailor aspects of these recommendations. You can customize these sessions based on your group size, available time, and discussion content to better fit your institution's needs. You may also choose to create additional guidelines for using the tool depending on your institution's size, the number of staff members, or specific goals. The assessment tool is one part of your institution's process to increase gender equity, but can be integrated into other areas of your institution's equity work.

## HOW TO USE THE ASSESSMENT TOOL DEFINING LOCATIONS

To ensure each institution follows the same data collection practices, we have shared language to help assist in the use of the assessment tool on page 11.

### Space

For example, a space could be an exhibit hall (or all museum exhibits), a website, an advertising campaign, an area of signage, a curriculum book, a set of promotional materials, or any other content from your museum that includes images or videos.

### Type

The type of media being analyzed within an element. Types mainly include photographs or videos, but you may choose to include animations, drawings, or other media. *Collect data for only one type of media on each data collection sheet.*

### Element

An element is a section of a space. Dividing up a space makes it more manageable to collect data and reference that data later. Choosing what constitutes an element is up to the data collector. However, an element should be labeled in a way that makes it easy to find later. For some small spaces, you may choose to consider the entire space as one element, such as in the flyer example below.

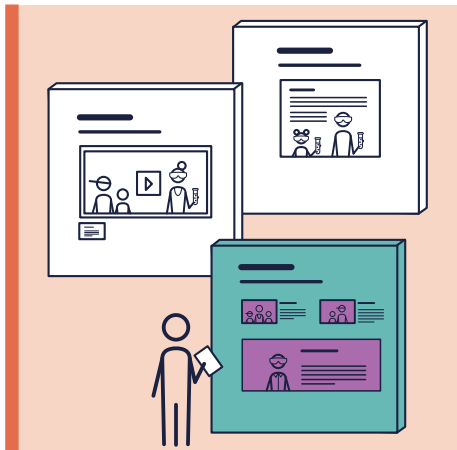
## EXAMPLES

### Exhibits

**Space** the entirety of an exhibition

**Element** distinct area or content grouping

**Type** all photos within that area

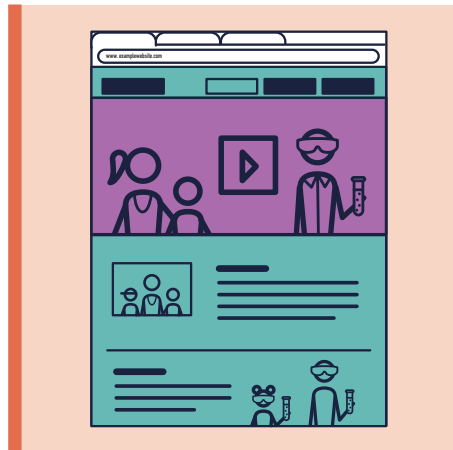


### Websites

**Space** the entirety of a website

**Element** a tab or page within the website

**Type** all videos within that tab or page

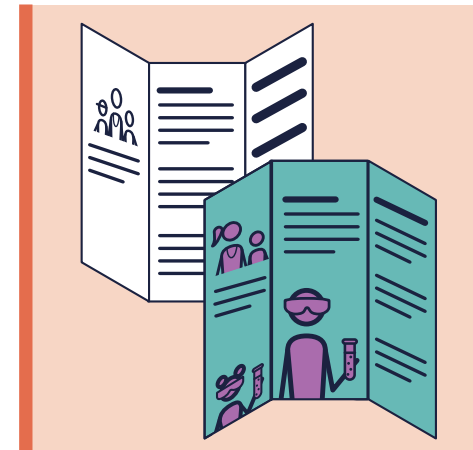


### Flyers

**Space** all promotional flyers

**Element** the entirety of one flyer

**Type** all photos within the flyer



## HOW TO USE THE ASSESSMENT TOOL GLOSSARY

To ensure each institution follows the same data collection practices, we have shared language to help assist in the use of the assessment tool on page 11.



### PERCEIVED GENDER

You will use the tool to count the perceived gender of people in images or videos. Use each person's visual cues such as clothes, hair, and body language, to help decide how you are perceiving their gender. Bear in mind that when using the tool, your goal is to categorize people based on your initial assumptions, which will help the data better reflect what museum visitors are most likely to think when they see an image.

#### I perceive this person to be a woman/girl or man/boy

- Data collectors should record their own perceptions of the genders for the people in the images reviewed.

#### I do not perceive this person to be a woman/girl or man/boy

- If a data collector does not perceive the person to be a woman/girl or a man/boy, or cannot decide what gender they perceive, record a tally mark here.
- If there is not enough information to perceive a person's gender (for example, if only a small part of their face is visible) they should not be included in the count.

#### Gender non-conforming

- Place a mark in this box if you perceive a man or woman to have visual cues (e.g., clothing, hair style, etc.) that are primarily different than what is typical for their gender

### What if I choose the wrong gender?

In conducting this assessment, we are unable to ask the people in the images about their gender identity, so it's OK if you mark a person in a gender category different than how the person might identify. The purpose of this tool is not to decide someone's gender identity, but to capture your personal perception of gender as it appears in your museum's content, so we better can understand how visitors may view representation in your museum.



### AGE

#### Perceived as a Child

- Between birth and 17 years

#### Perceived as an Adult

- Age 18 or above. If you are unsure if an individual is a teenager or young adult, count them as an adult.



### STEM

#### Children "doing science"

- Children using a scientific tool, such as those used to observe or measure
- A child that is merely observing another individual "doing science," should not be counted as doing science.

#### Adult STEM Professionals

- Adults shown as a professional in a STEM field. This may be shown with clothing (e.g., a lab coat), job-related tools or instruments, or with accompanying text that describes the person as a STEM professional.



## HOW TO USE THE ASSESSMENT TOOL RULES & TIPS

To ensure each institution follows the same data collection practices, we have provided standard rules below. Please refer to these when using the tool on page 11.

### Images of people



- The focus of counting is on images of real people. However, your museum may choose to include drawings, animations, cartoons, or comics of humans if desired.
- A person should be visible enough to be counted (e.g., do not count a close-up part of a face). A person's face should be at least partially visible.
- Groups of people above 7 individuals should not be counted. However, if only one person in a crowd is in focus, they can be counted.
- A person whose image occurs more than once in an element should only be counted once.

### Videos of people



- An individual must be visible for at least 5 continuous seconds to be counted.
- Consider the first 30 seconds of videos with discrete beginnings and ends.
- Looping videos without discrete beginnings or ends should be considered for 30 seconds at a randomly selected time.

### Additional Representation Categories

At your institution, you may want to learn about representation—and possible gaps—in more areas. Fill in the blank spaces provided in the bottom two rows of the assessment tool to collect data on additional categories. You may choose to collect data on any category that is important for your museum and community. Examples of additional categories you may decide to count may include:

- Racial or ethnic categories, such as People of Color or Underrepresented Minorities
- People with visible disabilities, such as people who use wheelchairs
- Working collaboratively vs. working alone
- Being active vs. being passive (or talking vs. listening for videos)
- A combination of other categories, such as people of color who are STEM professionals, wheelchair users who are underrepresented minorities, adults doing science (but not STEM professionals), etc.

### Tips for collecting data

- To ensure consistency, you may choose to have multiple data collectors assess the same spaces, then compare results. However, data collectors should record their own perceptions. It is not necessary for data collectors to agree on how to record each person in an image/video.
- Use the Notes page to record any thoughts you have as you collect data. You may choose to note images that reinforce (or break!) common stereotypes, patterns you observe, or anything else that you may want to discuss with your colleagues during the staff session after using this tool.
- After the assessments are complete, participants should give their forms to the data reporter so that they may enter all data into the spreadsheet found at [www.astc.org/ifthen-toolkit](http://www.astc.org/ifthen-toolkit).
- Depending on the size of your museum, you may choose to have data collectors assess spaces that align with their area of work (e.g., exhibit developers assess exhibits, marketing team assesses social media, etc.)

**We value your privacy!** The data you report will not be attributed to you or your organization. All data will only be used to report trends across the field. Our goal is to support museums no matter where they are in their efforts towards more equitable gender representation.

# FILLING OUT THE ASSESSMENT TOOL

The IF/THEN® Gender Representation Assessment Tool will equip your science center with an easy method of gathering data on how gender is being represented in your exhibits, websites, program materials, and other content. Data collectors will use paper print outs of the tool on page 11 to collect data. Print as many copies of the tool as needed to collect data from every space and element you've chosen to assess (at least 1 page per element).

- 1 Write in a name for the Space and Element you are assessing, and choose the type of media. The names should be descriptive enough to allow you to identify later where this data was collected.
- 2 Starting with all the images of **adults**, mark each person in the Total Adults row based on how you perceive their gender.  
  
If you don't perceive the person to be a woman or a man, place a mark in the *I do not perceive this person to be a woman or a man* box.
- 3 If a person is displaying cues (e.g., clothing, hair style, etc.) that do not match what is typically associated with the gender category you have placed them in, place a mark in the corresponding *Gender Non-Conforming* box.
- 4 For any adult that appears to be a STEM professional or any child who is actively participating in STEM, place a mark in the corresponding STEM professional/ "Doing STEM" box.
- 5 If your organization has decided to look at additional representation categories, use the blank spaces on the bottom two rows to record the information.
- 6 Repeat steps 2–5 for all images of **children**.

## Examples

**Space** is the entire area that is being evaluated, such as an exhibit hall or website

**Element** is a section within the determined space, such as an exhibit component or a web page

Choose just one from the **type** options

**Space** \_\_\_\_\_

**Element** \_\_\_\_\_

**Type (choose one)** ☐ photographs ☐ videos ☐ other \_\_\_\_\_

	I perceive this person to be a woman	I perceive this person to be a man	I do NOT perceive this person to be a woman or man
<b>ADULTS</b>			
Total Adults			
Gender non-conforming			
STEM Professional			
person of color			

Every person observed will be tallied based on how you perceive their gender.

Look at a person's clothes, hair, and body language, see if they are expressing in ways that are largely different from what is typical of their (perceived) gender, to determine if you should mark them as gender non-conforming.

Look at a person's actions and clothing, plus any objects around them (such as work-related tools) to determine if you should mark them as a STEM professional.

Record any additional representation categories here.

This option is one way to account for people who may not be a binary gender.

## ASSESSMENT TOOL

Print as many copies of this page as needed to capture data from all the spaces and elements you plan to assess (at least one copy per element).

Space \_\_\_\_\_ Element \_\_\_\_\_ Type (choose one) ☐ photographs ☐ videos ☐ other \_\_\_\_\_

ADULTS		I perceive this person to be a woman	I perceive this person to be a man	I do NOT perceive this person to be a woman or man
	Total Adults			
	Gender non-conforming			
	STEM Professional			

CHILDREN		I perceive this person to be a girl	I perceive this person to be a boy	I do NOT perceive this person to be a girl or boy
	Total Children			
	Gender non-conforming			
	"Doing STEM"			

See pages 7-10 of this toolkit for definitions and more information about how to use this tool.

# NOTES

Use this space to record any thoughts about your observations. You may choose to note images that reinforce (or break) common stereotypes, patterns you observe, or anything else that you may want to discuss with your colleagues during the staff debrief session after using this tool.

space	element	type	Notes

## AFTER USING THE TOOL

### Data Reporters should...

- Collect all forms from Data Collectors
- Download the data entry spreadsheet at [www.astc.org/ifthen-toolkit](http://www.astc.org/ifthen-toolkit)
- Enter all data into the spreadsheet and email it to [ifthen@astc.org](mailto:ifthen@astc.org)

### Please submit your data as soon as possible. You must email your completed spreadsheet on or before April 30, 2021 in order to:

- Have your institution's data contribute to a field-wide report, and receive a copy of the summary report
- Receive up to \$500 in funding to use the tool (limited to the first 100 museums, must apply online at [www.astc.org/ifthen](http://www.astc.org/ifthen))
- Be eligible to apply for IF/THEN® grant funding by proposing a project that addresses gender equity in your museums. ASTC will open round 2 of IF/THEN® grant applications in November of 2020. Priority will be given to those who have submitted data from the toolkit.

Learn more at [astc.org/ifthen-grants](http://astc.org/ifthen-grants).

### Remember

The data you report will only be used in aggregate to describe trends across the field. ASTC will not include identifying information about your institution in the field-wide report.

Download this data entry spreadsheet at [www.astc.org/ifthen-toolkit](http://www.astc.org/ifthen-toolkit)

The data entry spreadsheet will automatically compile your data into a quick summary report.  
See the first tab for directions on how to use the spreadsheet.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Space 1:	[NAME]				Select Space type here:					Notes on this space:				
2						ADULTS					CHILDREN				
3						I perceive this person to be a:					I perceive this person to be a:				
4						Woman	Man				Girl	Boy			
5	Element 1:	[NAME]													
6															
7															
8															
9															
10															
11															
12															
13															
14	Element 2:	[NAME]													
15															
16															
17															
18															
19															
20															
21															

### After sending us your spreadsheet, be on the lookout for emails letting you know

- when to apply for IF/THEN® grants
- how to join our gender equity community of practice
- how to access the free photos and videos in the IF/THEN® Collection

## FAQ

### Why should museums care about representation?

According to the 2017 Museums and Public Opinion report, 97% of Americans believe that museums are educational assets for their communities. Science centers and museums are regarded as highly credible sources of information by 78% of Americans, while 74% of Americans believe science centers and museums should recommend actions or behaviors (National Awareness, Attitude & Usage Study, 2010). The overwhelming majority of public trust in museums as institutions of moral standard and education, places science centers and museums in a position of opportunity to make a sizable impact on the representation of women and gender minorities within STEM. It is important for museum visitors to see diversity in the STEM workforce. The gender gap in STEM fields, coupled with persistent gender stereotypes, can negatively impact girls' understanding of their abilities (MacTavish, E.R., 2016) and discourage women from pursuing jobs in STEM fields (Cheryan, S., Master, A., & Meltzoff, A. N., 2015). The conscious action of including an equitable and diverse representation of gender within museum content is a continued step in challenging stereotypes and encouraging public conversation around understanding gender.

### What comes next?

All US-based science centers and museums that have submitted their collected data will be invited to apply for an *IF/THEN*<sup>®</sup> grant. *IF/THEN*<sup>®</sup> grant funds can be used for a variety of projects that will increase gender representation in your museum's content. After the first round of *IF/THEN*<sup>®</sup> grants in May 2020, a second larger round of *IF/THEN*<sup>®</sup> grants will begin in late fall of 2020. In total, ASTC plans to award \$600,000 to museums for projects that improve representation of women and gender minorities in STEM. For more information visit [www.astc.org/ifthen-grants](http://www.astc.org/ifthen-grants).

### How can we fix the issues we found?

In addition to being eligible to apply for *IF/THEN*<sup>®</sup> grants to work toward more equitable gender representation (see [www.astc.org/ifthen-grants](http://www.astc.org/ifthen-grants) for more info), museums that undertake the assessment process will have access to these helpful resources:

- A nationwide peer network of science museums committed to gender equity
- The *IF/THEN*<sup>®</sup> Collection, a digital media asset library containing free photos and images.

Participating in the assessment process will galvanize your efforts to address gender equity in your institution by providing data that will enable you to better identify areas for improvement, establish goals, and develop strategies for continued growth.

### What are we doing with the data we collect?

All data provided by participating museums will be kept confidential and only reported in aggregate. You can expect to have initial results by October 2020 and a final report by August 2021, which will be shared with all participants.

### Is ASTC collecting data on the additional categories our museum chose (i.e., race, visible disability, etc.)?

Our data entry spreadsheet will collect the data from your additional categories. While the focus of this project is on gender representation, we know this is not the only type of representation that matters. As a whole, minority groups are often under-represented in STEM fields and minority women account for only one in ten employed engineers and scientists (NSF, 2016). Reporting the additional categories chosen by your museum can help identify additional representation gaps and inform decisions about future directions for this work.

### What if I choose the wrong gender?

The purpose of this tool is not to decide what someone's gender identity is, but instead capture your personal perception of gender as it appears in your museum's content. In conducting this assessment, we are unable to ask the people in the images about their gender, so it's OK if you mark a person in a gender category different than how the person might identify. This process isn't perfect, and each person's perception of gender comes from their own understanding of the world around them, based on their unique life experiences and personal identity surrounding things like culture, gender, race, and sexuality.

### Should I count someone as a STEM professional if they don't look like it, but the text says they are?

Yes! STEM professionals can be identified through text, clothing, tools, action, or any other context clues that indicate they work in a STEM field.

### What careers can be considered as STEM Professionals?

Anyone who uses science, technology, engineering, and/or math regularly in their career can be considered a STEM professional. This includes a wide range of careers and topics from social sciences, medicine, science museum educators, and more. We know there might not always be a clear answer if a photo depicts a STEM professional. Do your best and ask yourself "would a visitor see this person as a STEM professional?"

## SEE ANSWERS TO MORE QUESTIONS ON OUR WEBSITE

Still have questions? You can find our live FAQ document with more information or send us a question! Visit [astc.org/ifthen-faq](http://astc.org/ifthen-faq) to submit a question.

## ADDITIONAL RESOURCES

To find more resources, visit [astc.org/ifthen-faq](https://astc.org/ifthen-faq).

### GIRLS AND WOMEN IN STEM

#### SciGirls Strategies: How to Engage Girls in STEM

Twin Cities Public Television

SciGirls empowers you to create a more gender equitable and culturally responsive learning environment that inspires, engages, and helps girls thrive in STEM. This book outlines their educational approach, rooted in what research has revealed engages girls in STEM. These strategies have also been proven to work with all learners, not just girls.

#### Portray Her: Representations of Women STEM Characters in Media

Geena Davis Institute on Gender in Media and Lyda Hill Philanthropies

This report was informed by an extensive ten year content analysis of STEM characters in entertainment media and a nationally representative survey of girls and young women. The report assesses how STEM professions are represented in media, and how these representations (and messages from society) affect girls' perceptions of and participation in STEM. The results show the profound role that media play in shaping young people's aspirations and career paths.

#### The Scully Effect

21st Century Fox, Geena Davis Institute on Gender in Media, and J. Walter Thompson Intelligence

This report presents the findings of the first systematic study of the influence of Dana Scully, a character from the popular show The X-Files, on girls and women pertaining to STEM—also known as the “Scully Effect.” Researchers found nearly two-thirds (63%) of women that work in STEM say Dana Scully served as their role model, highlighting the importance of representation of women in STEM careers.

### UNDERSTANDING GENDER

#### GLAAD Media Reference Guide

GLAAD

“GLAAD Media Reference Guide” is an online glossary of words and phrases that are used when discussing gender. The glossary consists of terms and definitions to aid in breaking down the complexity of gender and explain the vocabulary used, while also including a section on defamatory language that should be avoided when talking about gender. This resource is a good place to start for anyone who may be unfamiliar with the various words used when talking about gender, or for anyone who is looking for detailed yet simple definitions to better understand.

#### Talking About Pronouns in the Workplace

The Human Rights Campaign

“Talking About Pronouns in the Workplace” briefly explains what pronouns are, why they are important, and what organizations can do to open the workplace up to including pronouns in the everyday work environment. This handout is a good resource for anyone who is looking for ways to make their workplace more welcoming and inclusive, as well as anyone who may be unsure about pronouns and how they factor into discussions about gender.

#### The Gender Unicorn

Trans Student Educational Resources - Anna Moore and Landyn Pan

“The Gender Unicorn” is a graphic that most accurately portrays the distinction between gender, sex assigned at birth, and sexuality. The resource not only details why the graphic was created, citing its similarities to the plagiarized Genderbread Person, but also provides information on how to understand and use the graphic. This resource allows people to apply what they have learned about gender to themselves and explore their own identities.

### CREATING GENDER INCLUSIVE SPACES

#### Welcoming Guidelines for Museums

The LGBTQ+ Alliance of the American Alliance of Museums (AAM)

The “Welcoming Guidelines for Museums” uses the outline from AAM’s Core Standards for Museums (previously called the Characteristics of Excellence) to compile and elaborate on the preferred practices for museums when working with LGBTQ professionals and communities. This document also looks at six functional areas where museums can begin to apply these guidelines: Communication and Development, Curatorial, Guest Experience, Human Resources, Public Engagement, and Visitor Research and Evaluation.

#### Feminine Exhibition Design

Margaret Middleton

This article examines how implicit bias in museum design discriminates against feminine aspects of design and challenges the myth of gender neutrality. To more deeply explore femininity in museum design, Middleton proposes six principles of feminine design informed by those who value femininity in their design practice.

#### Exhibit Designs for Girls’ Engagement

The Exploratorium

This NSF-funded Exploratorium-run project aimed to identify the most important design attributes for engaging girls at STEM exhibits. The Exploratorium studied more than 300 physics, engineering, math, and perception exhibits at the science centers and identified nearly 100 exhibit design attributes that had the potential to better engage girls. The result is an overview of nine design attributes strongly and positively related to girls’ engagement.