



20 YEARS OF TRANSFORMING STEM

# Welcome!

## NGCP National Webinar: *The IF/THEN® Collection in Action... At Museums!*

Please respond to the poll on your screen.



National Girls  
Collaborative Project



**NGCP** 

20 YEARS TRANSFORMING STEM

**IF/THEN**<sup>®</sup>  
*Collection*

**The IF/THEN<sup>®</sup> Collection  
in Action... At Museums!**

February 08, 2022



# NGCP Vision

The vision of the National Girls Collaborative Project is to support and create STEM experiences that are as diverse as the world we live in.



# Our Goals

Connect + Create + Collaborate

1

## Maximize access

to shared resources within projects, and with public and private sector organizations and institutions.

2

## Strengthen capacity

of existing and evolving projects by sharing exemplary practice, research, and program models, outcomes, and products.

3

## Create the tipping point

for gender equity in STEM by using the leverage of a network and the collaboration of individual girl-serving STEM programs.



# NGCP Activities

- Network Partnerships
- IF/THEN Collection
- The Connectory
- FabFems
- National Webinars





# National Network of Collaborative Teams

- NGCP programs and partners are in every state
- With 33 Collaboratives that support 41 states
- Together, we facilitate collaboration across 42,500 organizations
- Serving 20.2 million girls and 10 million boys



# IF/TTHEN® Collection

The IF/TTHEN® Collection is the largest, free resource of its kind, with thousands of photos and videos of diverse and powerful images of contemporary women in STEM. The Collection is a critical component of IF/TTHEN®'s mission to inspire young girls to pursue STEM careers as well as create a culture shift in how the world perceives women in STEM.





# AAAS IF/THEN<sup>®</sup> Ambassador Program

125 Talented Women Across a  
Variety of STEM Fields





# Association of Science and Technology Centers

ASTC is a professional membership organization with a vision of increased understanding of—and engagement with—science and technology among all people.

- Over 500 science and technology centers and museum members
- Over 200 allied members at organizations that support science learning and engagement
- Members throughout North America and in nearly 50 countries



# Association of Science and Technology Centers

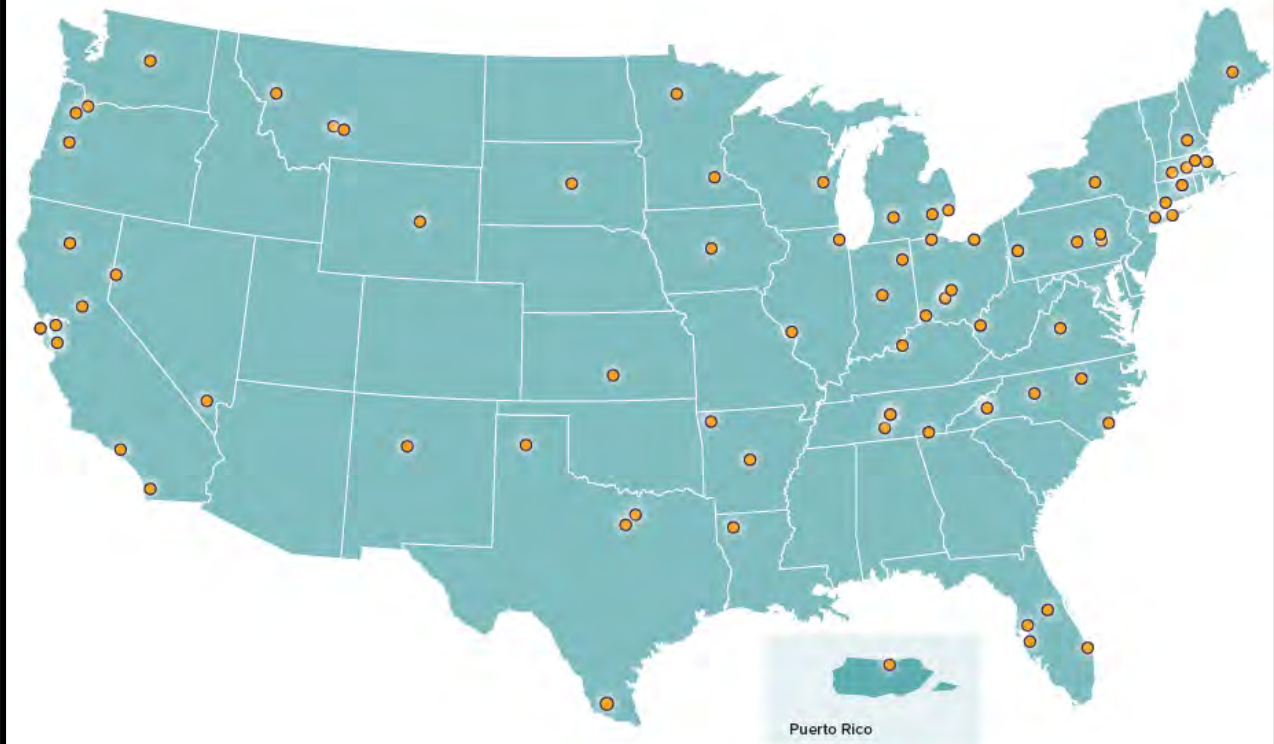
Through our work on IF/THEN, we have:

- Awarded ~**\$675,000** in grants to over **90 museums** in the United States
- Featured Ambassadors in museum content in **34 states** and Puerto Rico
- Reached an estimated **3.7 million people** in 2020 and 2021, and are projected to reach at least **6.8 million people** in 2022.



## Museums that received an ASTC IF/THEN Gender Equity Grant

Funding was available only for ASTC-member museums based in the United States.





# Association of Science and Technology Centers

In 2022:

- We will award an additional ~\$360,000 in grants
- Eligible organizations include museums, zoos, cultural institutions, and libraries in the U.S.
- Visit [www.astc.org/ifthen](http://www.astc.org/ifthen) to learn more and join our mailing list



IF/THEN<sup>®</sup>  
Collection

ASTC

# ASTC-NGCP IF/THEN® Collection Grants

- Five (5) ASTC Member Museums
  - Arizona Science Center (Arizona)
  - Glazer Children's Museum (Florida)
  - Northern Virginia Science Center (Virginia)
  - Orlando Science Centers (Florida)
  - South Dakota Discovery Center (South Dakota)
- Identify and collaborate with an NGCP community partner
- Utilize the IF/THEN® Collection
- September – January timeframe





# Arizona Science Center



**Alyson Smith,**  
Senior Vice President of Engagement



**Dr. Etta Kralovec,**  
Founding Director of the Borderlands Education Center,  
Professor Emerita of Teacher education at the University  
of Arizona



# Arizona Science Center

- Goal: To create a pop-up traveling exhibit with accompanying activities to raise awareness of STEM careers and inspire girls to pursue careers in STEM by featuring ambassadors of the IF/THEN® Collection.
  - Bilingual Exhibit
  - Highlighting ambassadors from Arizona
- Audience: Students in rural South Eastern Arizona, particularly in Cochise County
- In collaboration with the Bisbee Science Lab





Laboratorio  
de Ciencias  
de Bisbee



Bisbee  
Science  
Lab



Sky Island STEAM Express



Science Fridays-ASC comes  
once a  
Month!



Science Cafes



Pie and Sky



IF/THEN<sup>®</sup>  
*Collection*

6,312 people served in 2021.



# IF/THEN® on the Road with NSF Borderlands Teaching Fellows (NSF # 1950129)



# Other Impacts of the Collection

Arizona Science Center  
September 28, 2021

Meet Gretchen Díaz—scientist, educator, communicator and advocate for girls and women in STEM

Gretchen, who is Director of the Science Education Program at Ciencia Puerto Rico, dreamed of being a scientist and to impact people's lives. She achieved her dream by developing her career within the world of non-profit organizations. She has been able to create and implement programs to support researchers, and to impact teachers and students by fostering the participation of STEM experts in K-12 education

#HispanicHeritageMonth  
#ifthenshecan #genderequalitygrant



Get more likes, comments and shares  
When you boost this post, you'll show it to more people.

3,817 People reached 34 Engagements

Boost post

Joe Francis, Arizona Master Works and 26 others

Like Comment Share

Arizona Science Center  
@azsciencecenter

Skiing meets science with IF/THEN Ambassador Sarah Wilson Her experience as a skier has helped her as a biomechanical research engineer in injury prevention and recovery.

Learn more about snow science at Snow Week  
[azscience.org/snowweek](https://azscience.org/snowweek)

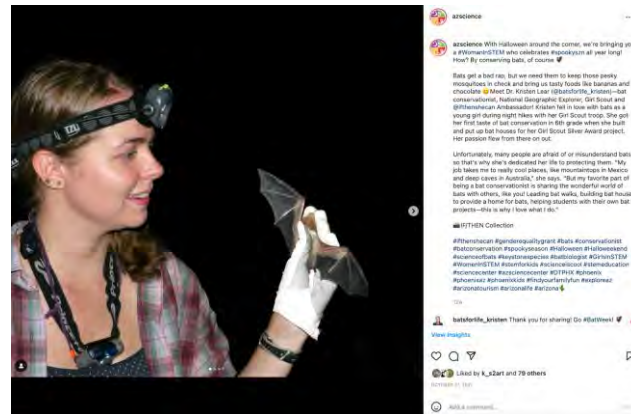
#ifthenshecan #genderequalitygrant



12:11 PM · Dec 28, 2021 · Twitter Web App

View Tweet activity

2 Likes



**IF/THEN**  
Collection



# Glazer Children's Museum



**Emily Woods,**  
School and Youth Programs Manager



# “Everyone is a Scientist” Series on GCM Cl@ssroom

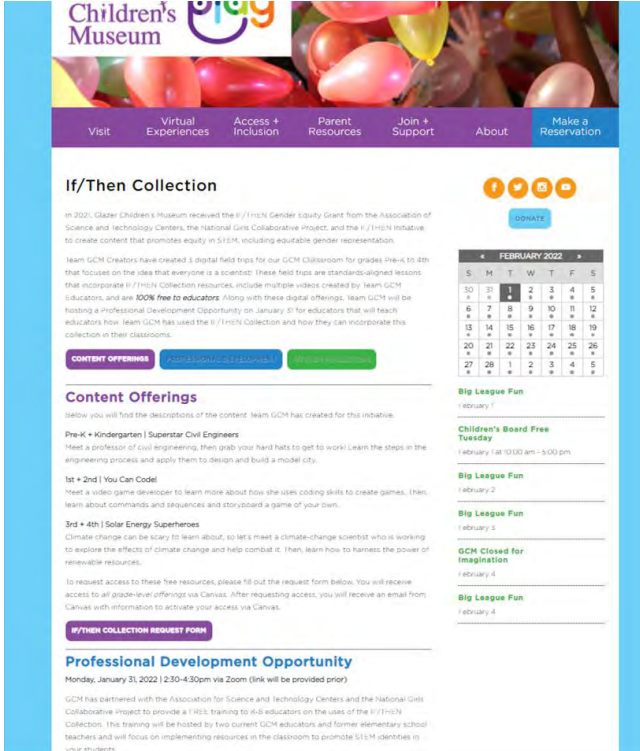
- Three, pre-recorded STEM lessons, highlighting an IF/THEN® ambassador
- Superstar Civil Engineers, You Can Code!, and Solar Energy Superheroes
- Partnered with the Tampa Bay STEM Network to distribute directly to almost 500 educators
- Content is ongoing and will remain on GCM Cl@ssroom forever



Glazer  
Children's  
Museum

# Promoting STEM Identities in the Cl@ssroom: A Training on the IF/THEN Collection

- Showcasing the IF/THEN® Collection, describing its importance and its exemplary uses
- Attended by 24 formal and informal educators
- Distributed over 40 IF/THEN® posters immediately following the training
- *“Thank you for organizing this training! I've used the IF/THEN® Collection before, and still learned a lot of new things. I know that I will be able to leverage this resource much more skillfully after this training.”*
- *“Thank you to Emily Woods and Devidasa Kawal for keeping everyone engaged throughout the training. Your excitement for the IF/THEN® Collection was honest, and I am looking forward to using the resources in my classroom.”*



The screenshot shows the website for the IF/THEN Collection at Children's Museum. The page features a navigation bar with links for Visit, Virtual Experiences, Access + Inclusion, Parent Resources, Join + Support, About, and Make a Reservation. The main content area is titled "If/Then Collection" and includes a calendar for February 2022. Below the calendar, there are sections for "Content Offerings" and "Professional Development Opportunity".

FEBRUARY 2022						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	1	2	3	4	5

[glazermuseum.org/ifthencollection](https://glazermuseum.org/ifthencollection)



Glazer  
Children's  
Museum



# Northern Virginia Science Center



**Mary Williams,**  
Assistant Director of Experience



**Jessica Fite,**  
Latina SciGirls Program Coordinator



# Northern Virginia Science Center Foundation



Our mission today.  
[childsci.org](http://childsci.org)



Our vision for the future.  
[novasci.org](http://novasci.org)

## Mission Today

To inspire a love of learning STEM by providing unique opportunities to explore and create.

## Vision Tomorrow

To create a world-class interactive science center that ignites the curiosity in all of us.





# Collector Cards



# Latina SciGirls Program



**IFTHEN**  
*Collection*



# Webinar with VPOST (Virginia Partnership for Out-of-School Time)

As the state afterschool network, VPOST is working towards increasing access to STEM programs.

Together we hosted *Coffee Chat: Utilizing Role Model Collector Cards to Engage Girls in STEM*, a webinar to share IF/THEN Collection resources and ideas for implementation.

Attended by representatives from 31 organizations.

Eleven individuals responded to the post-survey and requested collector cards to utilize in their programs.



# Impact

it make me feel to learn  
more about science.

They kinda gave me an idea on what I  
want to be my job

It made feel more intrested in science and the differnt careers

they are cool and if I work hard enough  
I can reach there ranks

# Orlando Science Center



**Nicole Rivera,**  
Director of Education Initiatives





# Goals

- Engage girls in STEM and create programs featuring women in STEM careers
- Reach at least 23 different Girl Scout Troops in K-8<sup>th</sup> grade
- Provide career exposure to girls and inspire science learning for life



**IF/THEN**  
*Collection*

# IF/THEN® Collection

- Created a STEM Explorers Guide
- Created Extended Learning Resources



## DAISY

Girls who complete the "Coaster Challenge" will not only learn how roller coasters work when it comes to motion and speed, but they will also complete steps 2 and 3 of their Roller Coaster Design Challenge Badge. Make sure to build your track and test it out! If the marble doesn't make it all the way through your roller coaster, keep trying new designs until it does.

## JUNIOR

Not only can you learn about what a simple machine is, but you can also see how the machine works for yourself! After learning how the pulley system works, take a seat on each of the pulley chairs to see the simple machine in action. This is a fun challenge and it completes Step 1 of your Crane Design Challenge, while also working towards your Entertainment Technology badge.



STEM DISCOVERY CENTER

## GIRL SCOUTS EXPLORATION GUIDE



Welcome!

We are so happy to have you here. Through your adventures with Girl Scouts, you have been able to try many new interests and occupations. Today, you will have the chance to become a STEM explorer! As you discover, create, and experiment your way through the Orlando Science Center, think about what you are accomplishing. You may be able to take those new experiences and turn them into badges! This guide will help you know what exhibit pieces to look out for to help you build your badges.

Remember, just like you, the Orlando Science Center is always changing and growing. Make sure to come back for more chances to explore and maybe even earn a few more badges! Thanks so much for joining us today and happy scouting!

MADE  
POSSIBLE  
BY: **IF/THEN**  
AN INITIATIVE OF THE NGCP PARTNERSHIP



**ORLANDO SCIENCE CENTER**

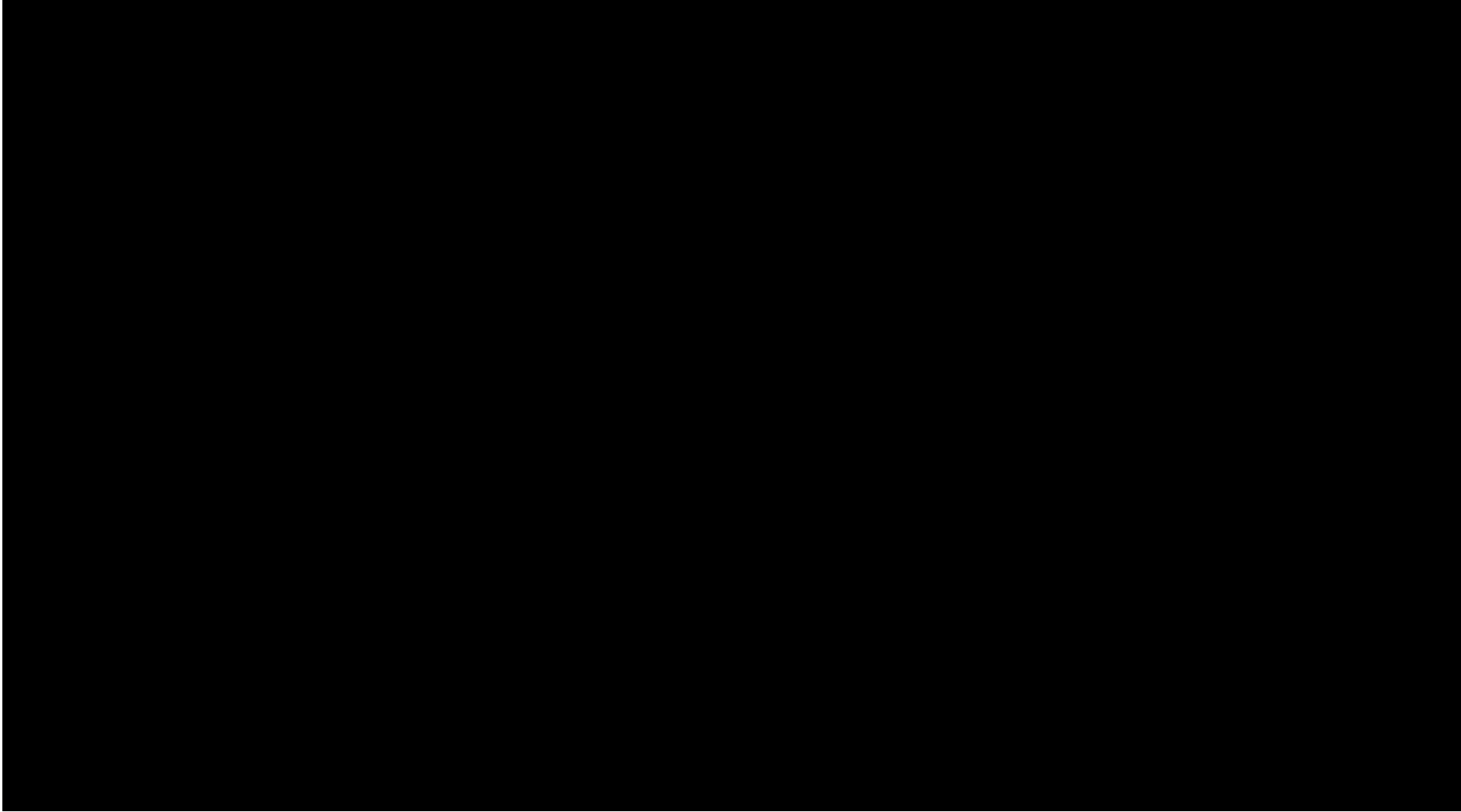
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**IF/THEN**  
Collection



# Impact

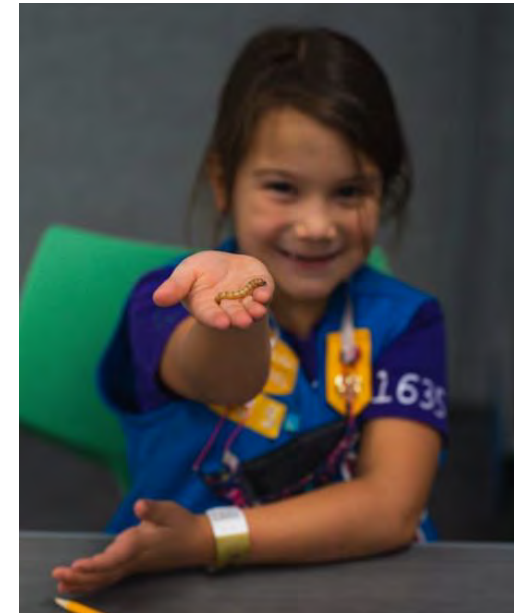


**IF/THEN**<sup>®</sup>  
*Collection*



# Impact

- Reached 68 different Girl Scout Troops
  - 366 girls in K-8<sup>th</sup> grade and 87 adults
- Helped 366 Girl Scouts earn a STEM Career Exploration, Eco Learner, or Bugs Badge
- When asked for 1-3 words that describe someone who does science:
  - Awesome, boundless explorer, woman, curious, smart



**IF/THEN**  
*Collection*



# High Level Findings from Reports

Museums report that **access to resources** and **materials, staff capacity**, and external support from **partners, consultants**, and their **community** have the most influence on how their organization highlights women and gender minorities in STEM.



The **ease** of using the IF/THEN Collection and its **professional** and **diverse materials** has largely influenced the museums' awareness of opportunities for equitable gender representation in their activities.



# Q & A

We'll take questions from the chat and from people using the 'hand raise' function.

**IF/THEN**<sup>®</sup>  
*Collection*

**ASTC**





**20 YEARS** OF TRANSFORMING STEM

Learn more at [ngcproject.org](https://ngcproject.org)

