

# S A F F O R D C I T Y - G R A H A M C O U N T Y L I B R A R Y



DESIGNING AN ENGAGING EXPLORATION SPACE WITHIN  
YOUR LIBRARY TO PROMOTE STEAM LEARNING



# INTRODUCTION

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Assistant Library  
Director



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Sr. Library Technician

# STEAM IN OUR LIBRARY

- STEAM programming has been a focus since 2006
- Originally twice a month, mostly out of town presenters
- Single class field trips have been offered since 2012
- All grade visits have been offered in the last 4 years
- Field trip requests have increased in the last 4 years



# WHAT IS AN EXPLORATION SPACE

## STEAM Exploration Space





  
TikTok  
@saffordlibrary

# WHY THESE SPACES ARE IMPORTANT

## Key Reasons:

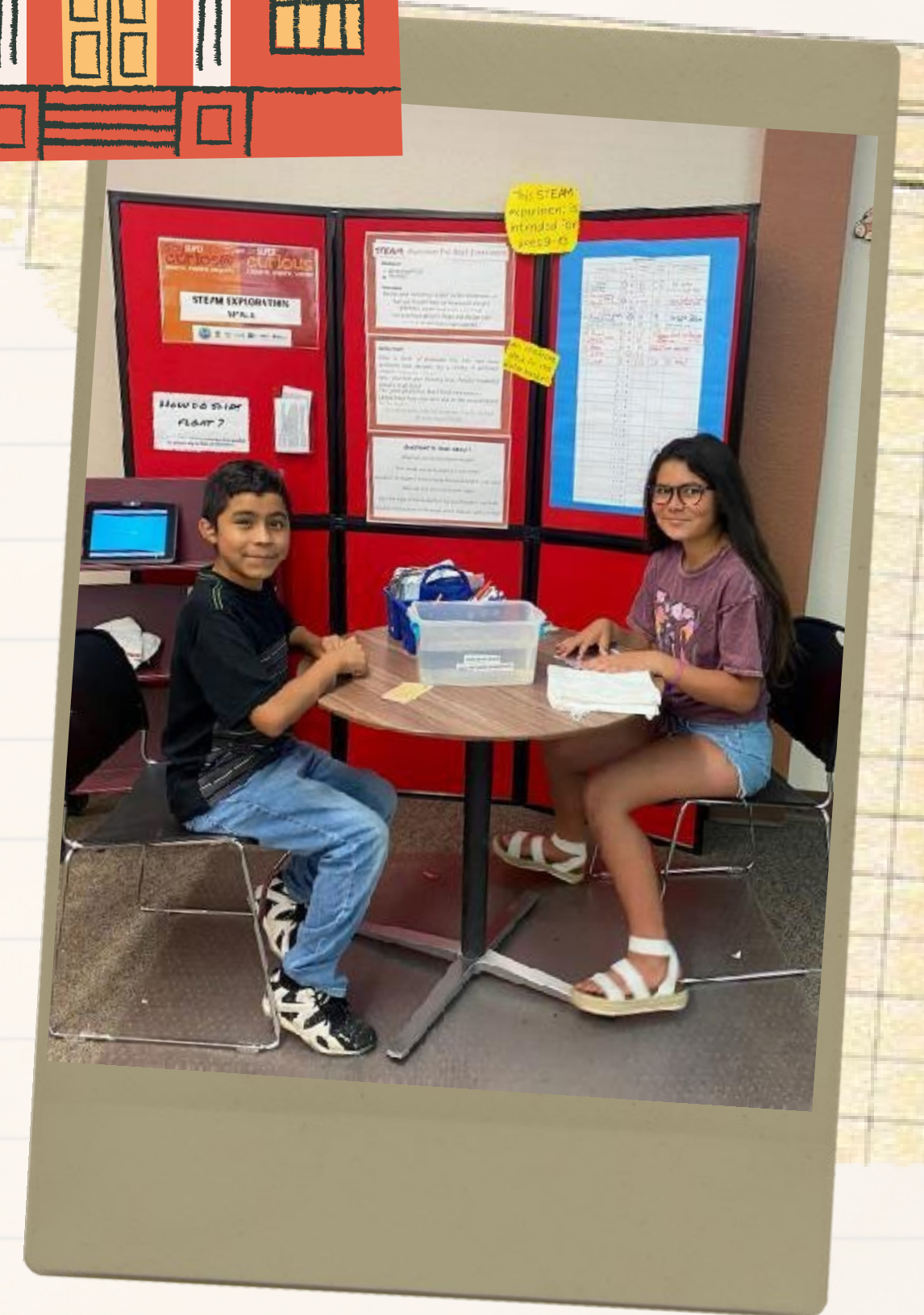
- Real- world relevance
- Preparation for future careers
- Develops Critical thinking & Problem - Solving skills.
- Fosters Curiosity and Creativity
- Enhances Diversity and inclusivity.

# ROLE LIBRARIES PLAY

Why libraries?

Libraries play a crucial role in STEAM education. We serve as a community hub, ideal place to engage the public in STEAM related activities, programs and discussions.

- Access to resources
- Technology and tools
- Programming & Makerspaces
- STEM/STEAM collections



# HOW TO START

**YOU DO NOT HAVE TO BE AN EXPERT!  
ANYONE CAN DO IT!**

Step 1: Identify optimal spot **S** within your library.

- Does not have to be a room.
- Central location
- Determine space necessities  
(table, chairs, portable display board , ect.)





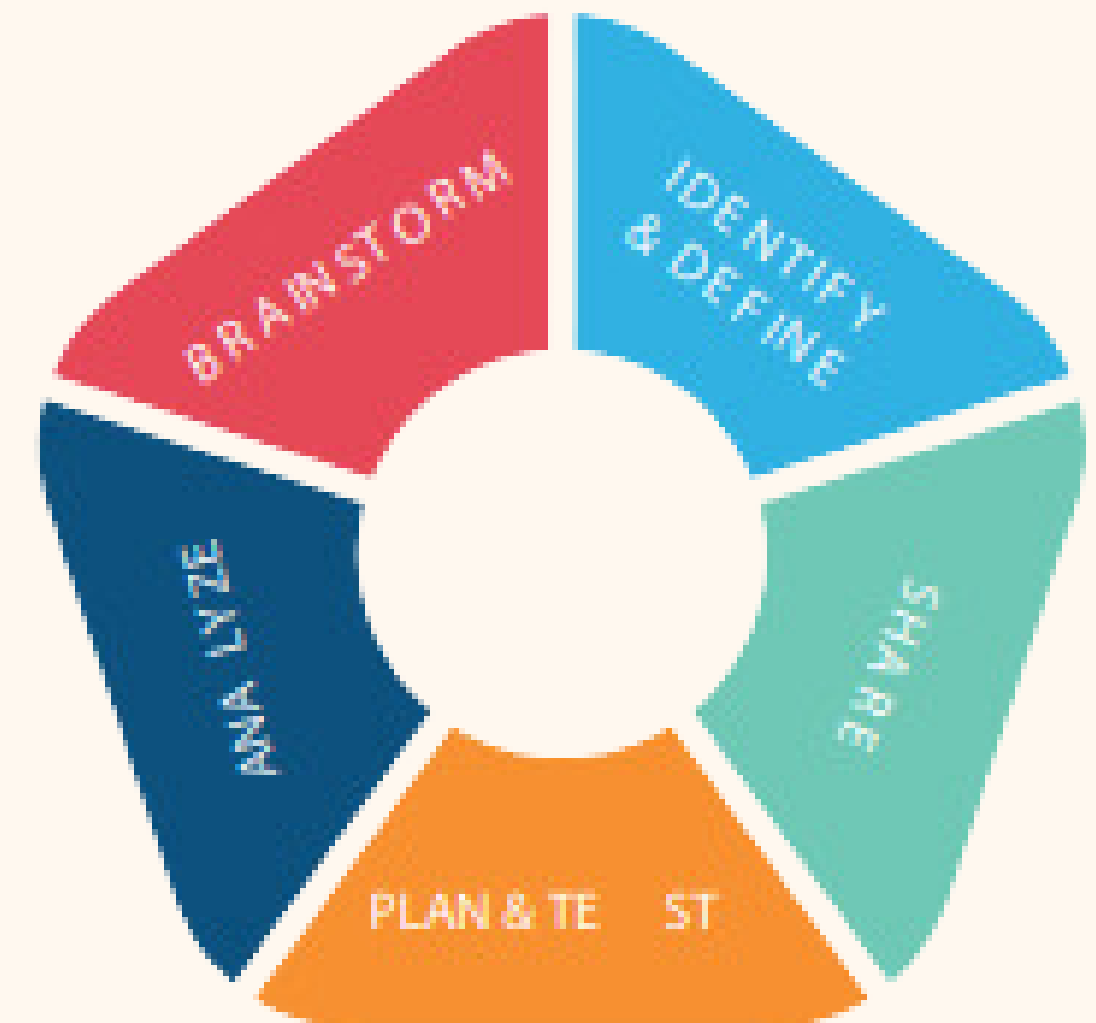
## STEP 2 : DETERMINE YOUR CONTENT

KEEP IN MIND THE “PURPOSE” OF THIS SPACE

- PICK A DISCIPLINE OR INCLUDE ALL 5
- PICK A PROJECT
  - HANDS-ON ACTIVITY, DISPLAY, GAME
- HOW OFTEN

THIS IS A SPACE NOT A PROGRAM

“STUDY THE SCIENCE OF ART. STUDY THE ART OF SCIENCE.” -  
LEONARDO DA VINCI



# RESOURCES

The Show Me Librarian

<https://showmelibrarian.blogspot.com/p/all-things-steam.html>

Star Net - STEAM activity clearinghouse -

<https://clearinghouse.starnetlibraries.org/168-im-super?p=3>

SciGirls Connect

<http://www.scigirlsconnect.org/>

Pinterest- <https://www.pinterest.com/>

School Library Journal

BOOKS! - Based for in home projects that do not require many materials

Local partnerships- local schools, businesses (Freeport Mine program )

# CONTENT CONTINUED

## Amelia Merced Bióloga | Biologist:

Dr. Amelia is a microscopist at the Institute of Neurobiology in Old San Juan, Puerto Rico. She received her PhD from the University of Southern Illinois, where her research was focused on moss stomata. She is particularly interested in the development and diversity of plant structures, especially bryophytes. Amelia has designed environmental learning curriculum and led school nature classes.

Amelia es microscopista, o sea una científica que trabaja con microscopios, en el Instituto de Neurobiología en el Viejo San Juan, Puerto Rico. Recibió su doctorado de la Universidad del Sur de Illinois, donde su investigación se centró en los estomas de musgo. Ella está particularmente interesada en el desarrollo y la diversidad de las estructuras vegetales, especialmente las briófitas. Amelia ha diseñado un currículo de aprendizaje ambiental y ha dictado clases de naturaleza en escuelas primarias y secundarias para Casa Pueblo y Bosque Escuela. Amelia vive en Puerto Rico y tiene dos hijos. Juntos, les encanta visitar El Yunque Rainforest para observar todo el musgo y la vida vegetal.



# PROMOTE DIVERSITY AND INCLUSION



Scan the QR code  
to learn more.

SciGirls

If she can SEE IT  
She can BE IT



AAAS  
IF/THEN  
Ambassadors

# CONTENT CONTINUED

## MATERIALS TO ENCOURAGE STEAM EDUCATION BEYOND THE LIBRARY WALLS

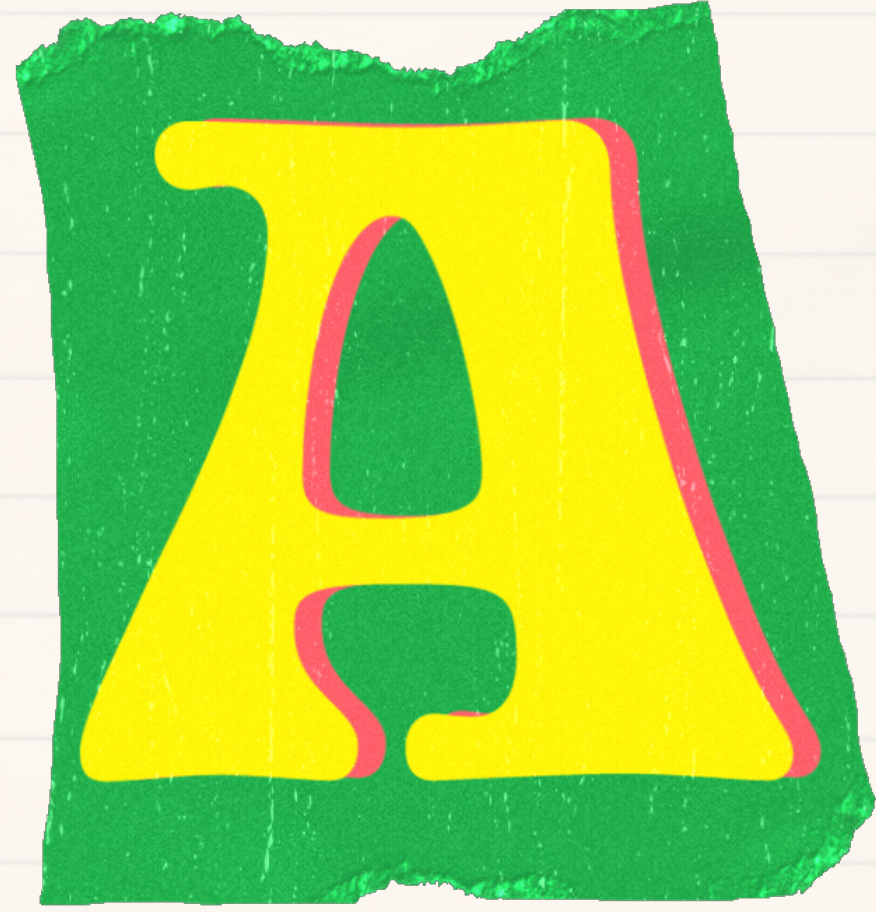


# LASTING IMPACT





&



THANK

YOU