# MAKING A GOOD PROPOSAL GREAT WITH BETTER BROADER IMPACTS

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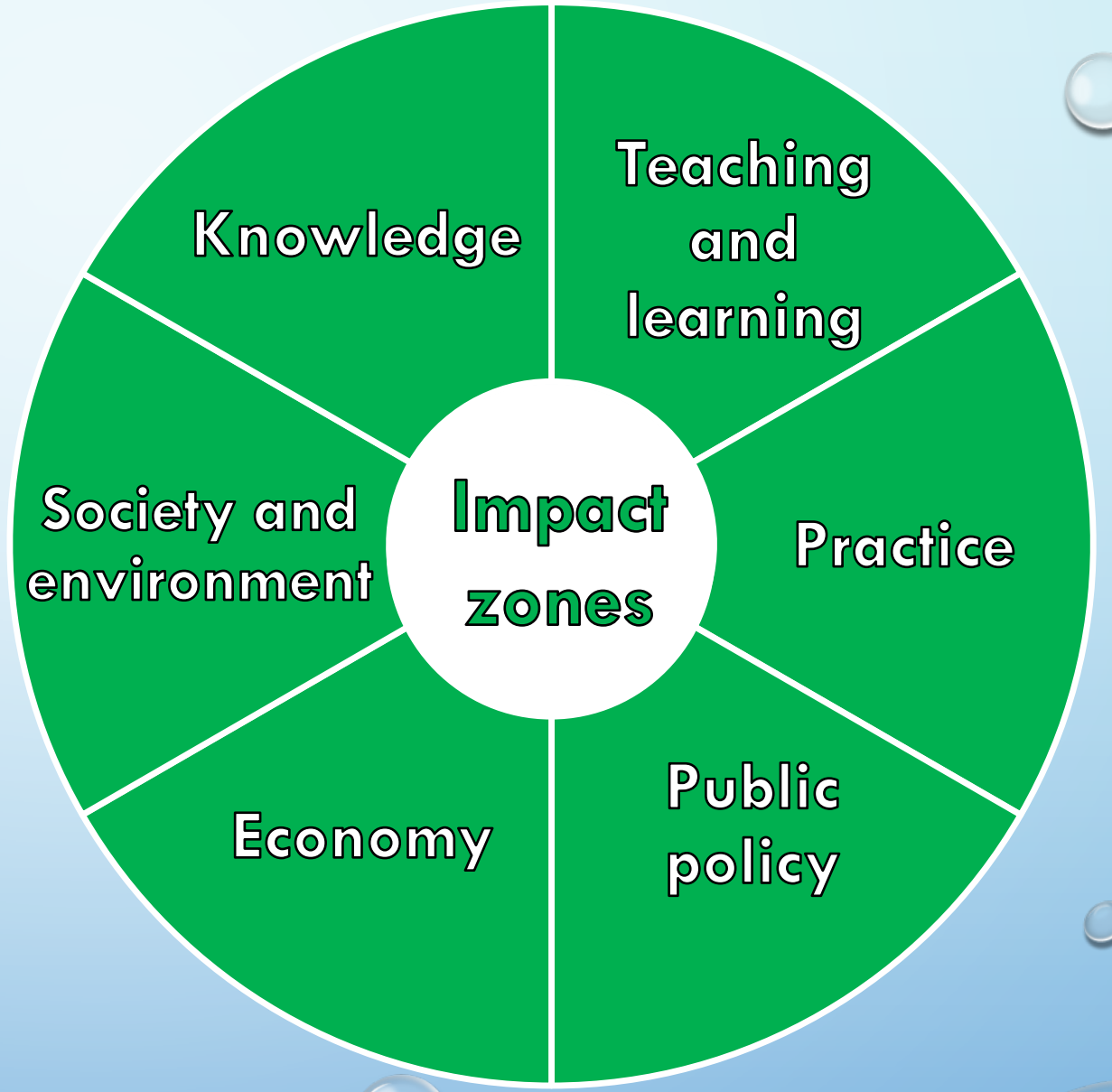
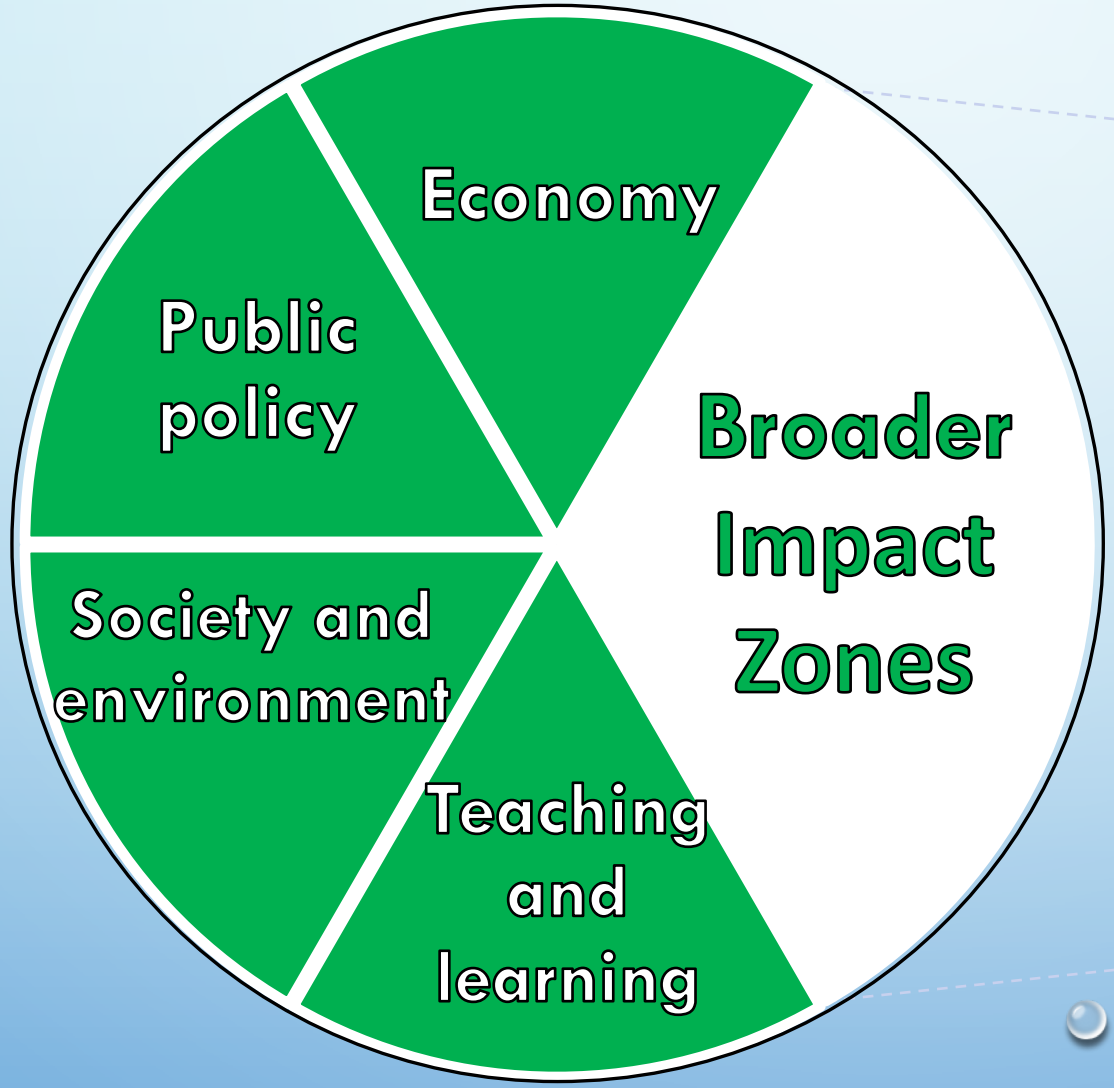
# SCIENTIFIC RESEARCH CAN NATURALLY IMPACT MANY DOMAINS




Emerald Publishing
https://www.emeraldgrouppublishing.com/authors/impact/index.htm

# THE IMPACT RESEARCH HAS BEYOND ACADEMIA…




Practice

Knowledge

# Should Researchers be Solely Responsible for their Research Effectively Impacting all Relevant Domains?

| | |
|---|---|
| Yes, it falls into the three academic statutes of teaching, research, and service. | 1 |
| Yes, the researcher is responsible for the effects of their research. | 2 |
| Yes, for a different reason all together. | 3 |
| No, one researcher does not have the time to oversee the impact of their research on all these domains. | 4 |
| No, the researcher is not an expert in many of these domains and cannot be solely responsible. | 5 |
| No, for a different reason all together. | 6 |

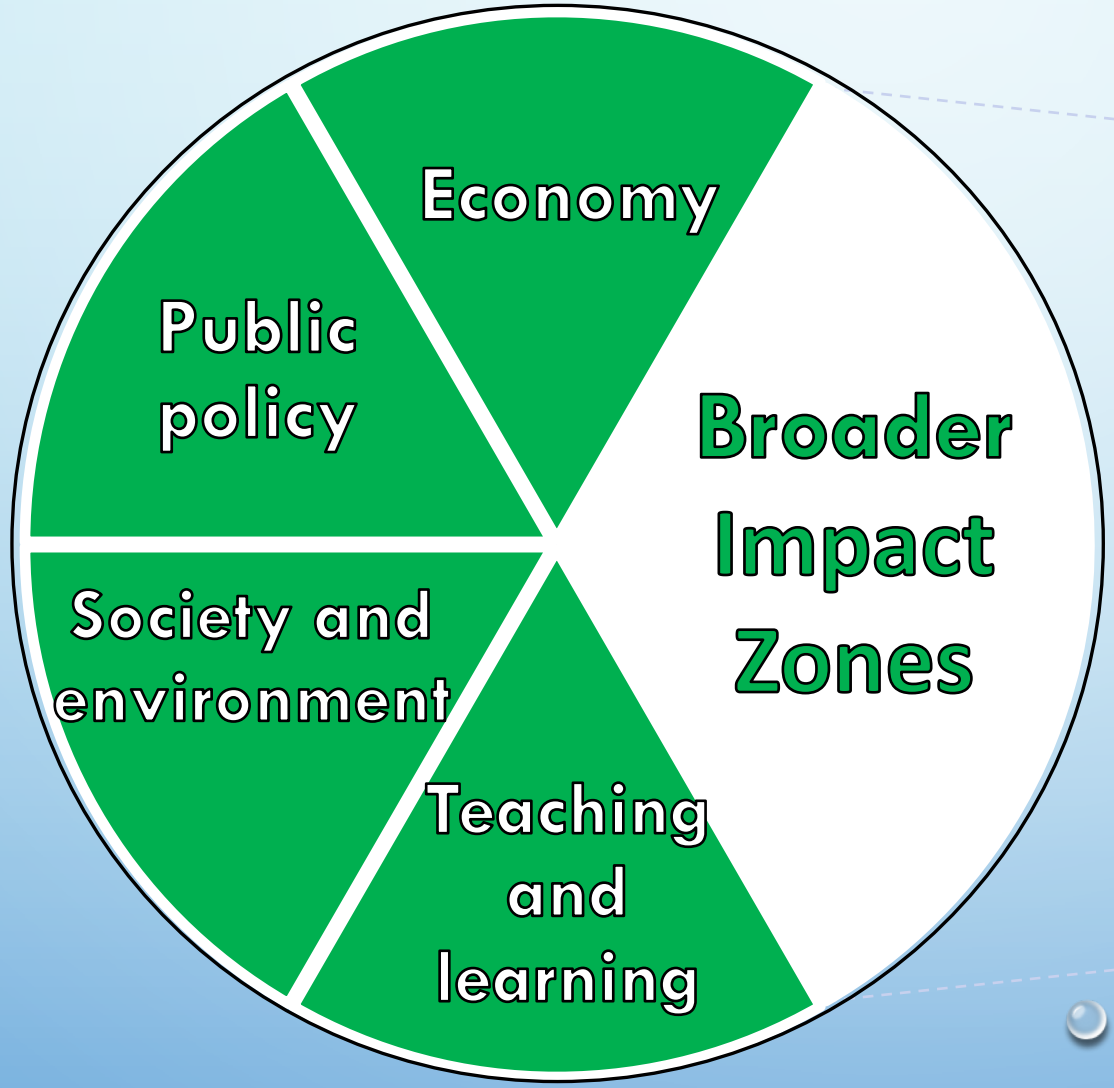
Total Results: 0

Poll Everywhere

# BROADER IMPACTS HELP BREAK ACADEMIC SILOS!


You are NOT Alone!

# THE IMPACT RESEARCH HAS BEYOND ACADEMIA…

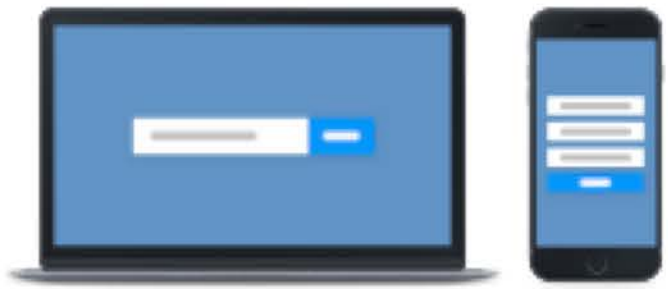



Practice

Knowledge

# What Resources are Needed to Maximize the Positive Impact of Research Beyond Academia?

## Join by Web



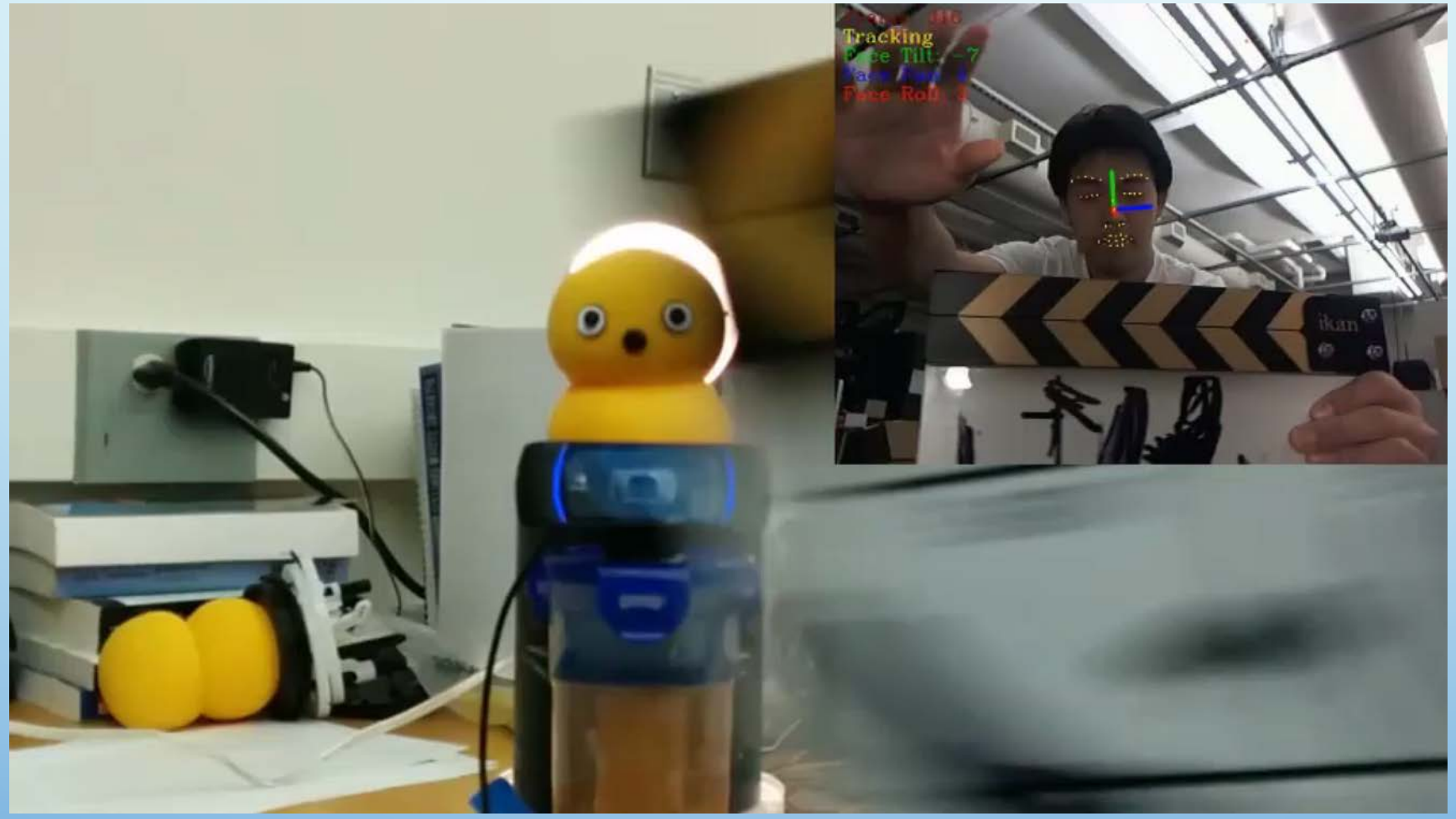
1. Go to **PollEv.com**
2. Enter **STEPHANIETOF514**
3. Respond to activity

## Join by Text

1. Text **STEPHANIETOF514** to **22333**
2. Text in your message

Total Results: 0

# AN EXAMPLE OF UNDER MAXIMIZED POSITIVE IMPACT



# STRONG TEAM OF EXPERTS BROKE OUT OF THEIR SILOS

**COMPUTER VISION**

**+**

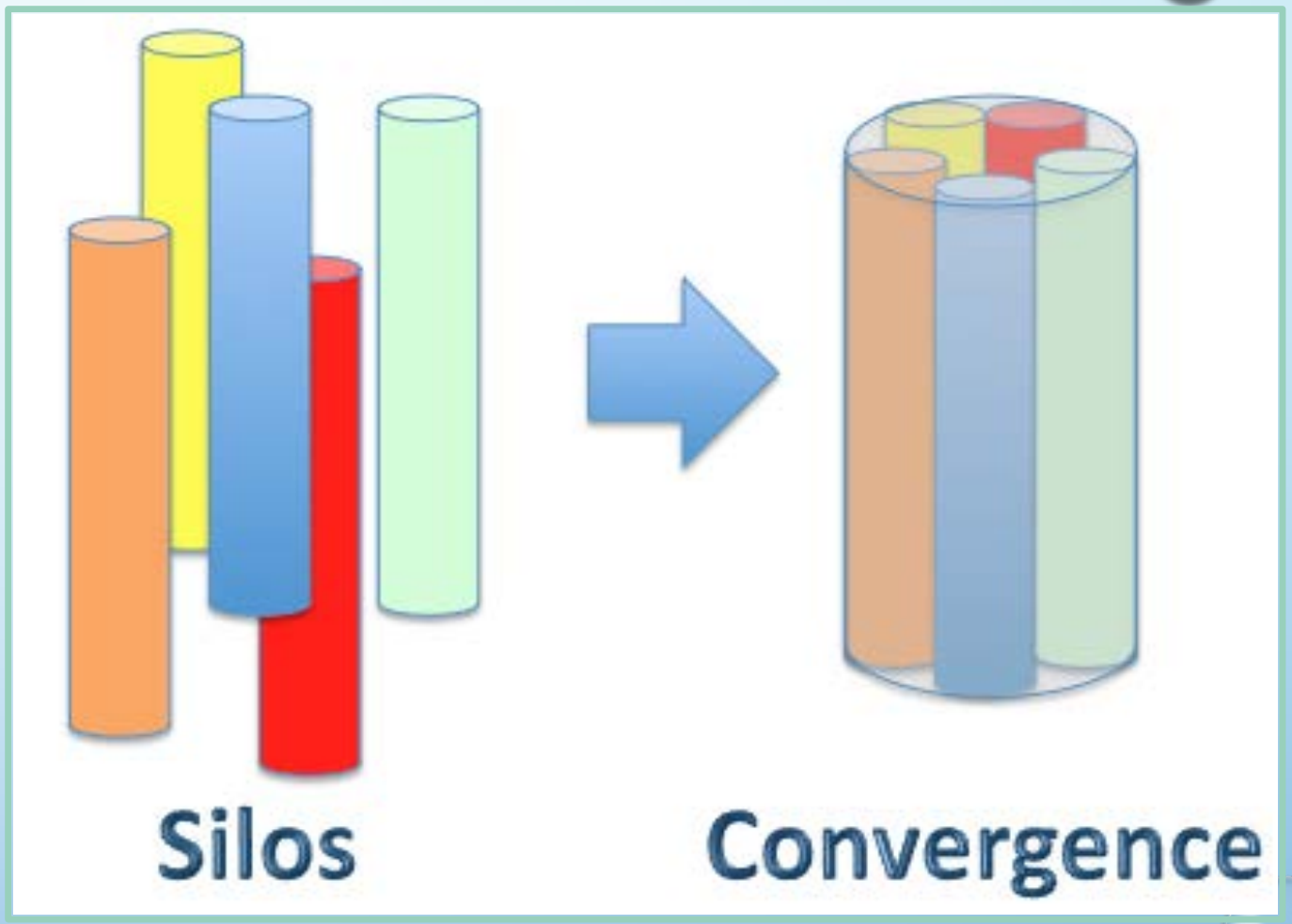
**ROBOTICS**

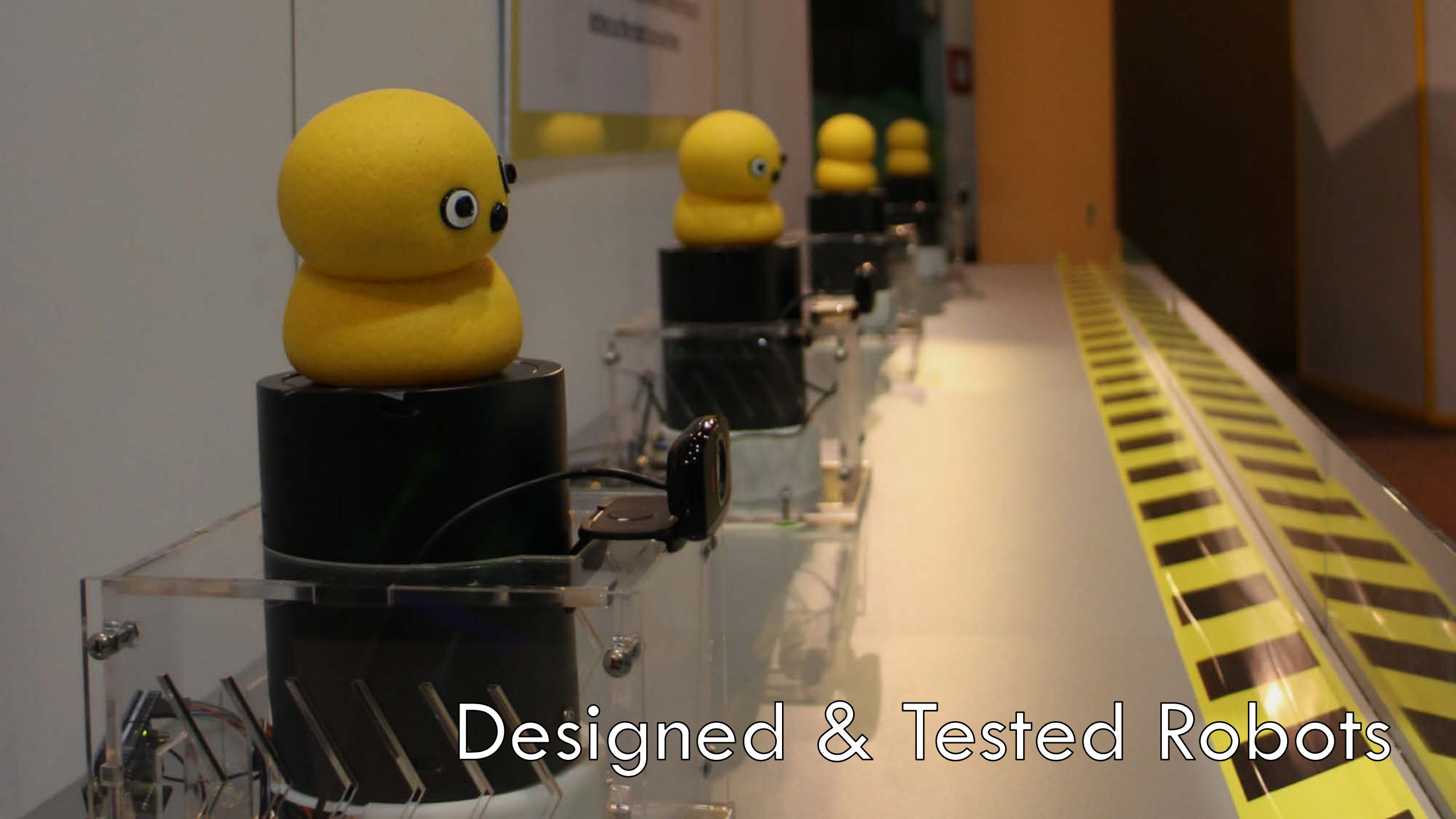
**+**

**DEVELOPMENTAL PSYCHOLOGY**

**+**

**EDUCATION & LEARNING**




Designed & Tested Robots

## Wall dimensions

- 14' width
- 6.5' height

## Platform dimensions

- 2' depth
- 30" height
- 2" slit open against wall to allow robot and computer wiring
- 2' wide entry door hinged at 6' mark with lock capabilities at 8' mark

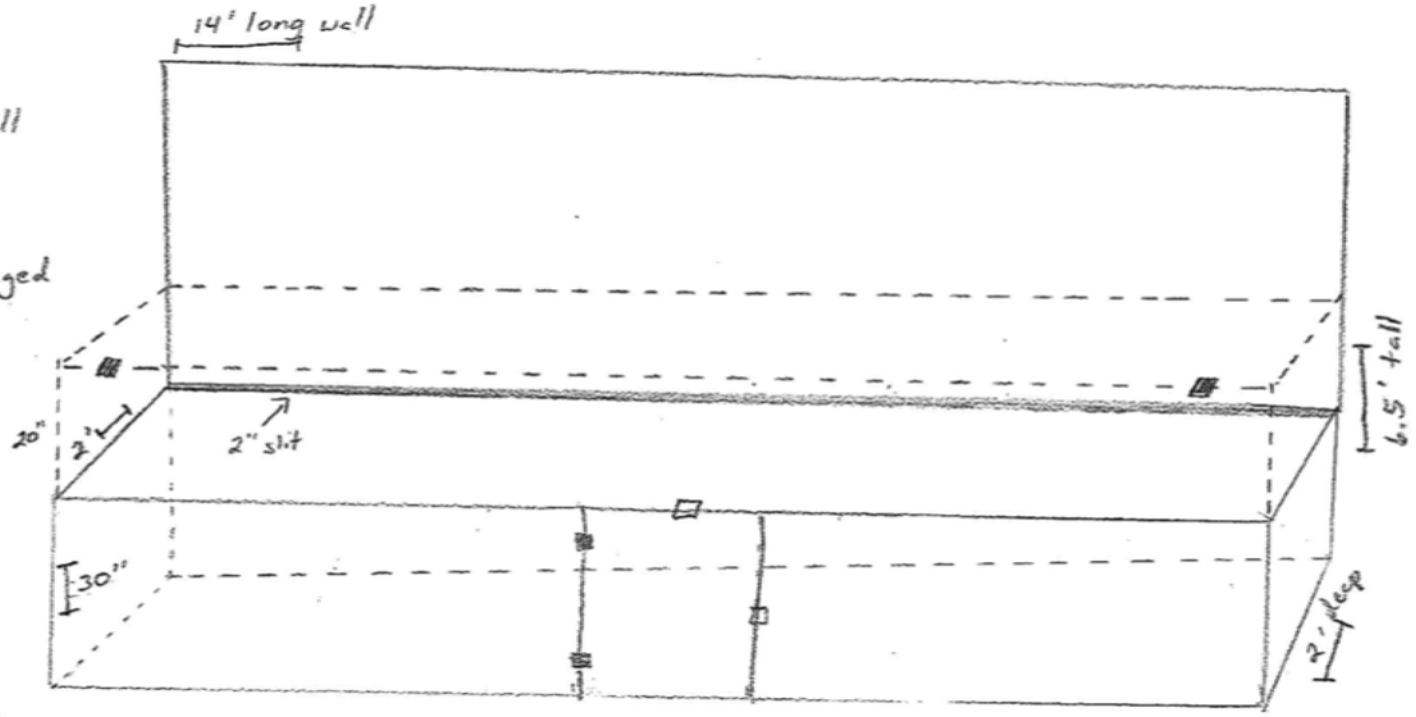
## Plexiglass barrier

- 20" height
- 2' depth
- top, side, + front cover
- front cover must be able to open with hinges attached to the top and lockable to the platform
- 4" slit cut across the width of the front cover 5" above the platform

Wall + platform materials - wood, painted white

48" flatscreen TV will need to hang on anterior side of wall

4.7"w x 9.8"h robot will also need to be attached to anterior wall




# BUILT THE DISPLAY

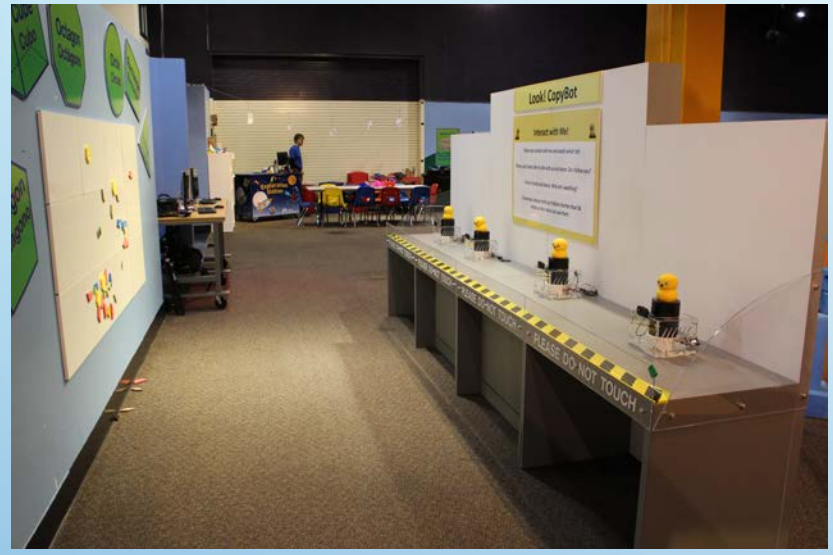
# FOUND THE HOST MUSEUM

Hello,

I am a project manager at Georgia Tech working with a large NSF funded grant that is currently undertaking an outreach project with Yale University to design an interactive robot platform that includes Keepon Robots that respond to eye contact by mimicking the actions of the person they have made contact with. **We are looking for museums and educational venues throughout Atlanta to display this platform and would like to learn more about the potential of displaying it at Fernbank.** Please put me in touch with someone at the museum who could help us out.

Best regards,
Stephanie

# PUT EXHIBIT ON DISPLAY AT THE ATLANTA CHILDREN'S MUSEUM JANUARY 2015

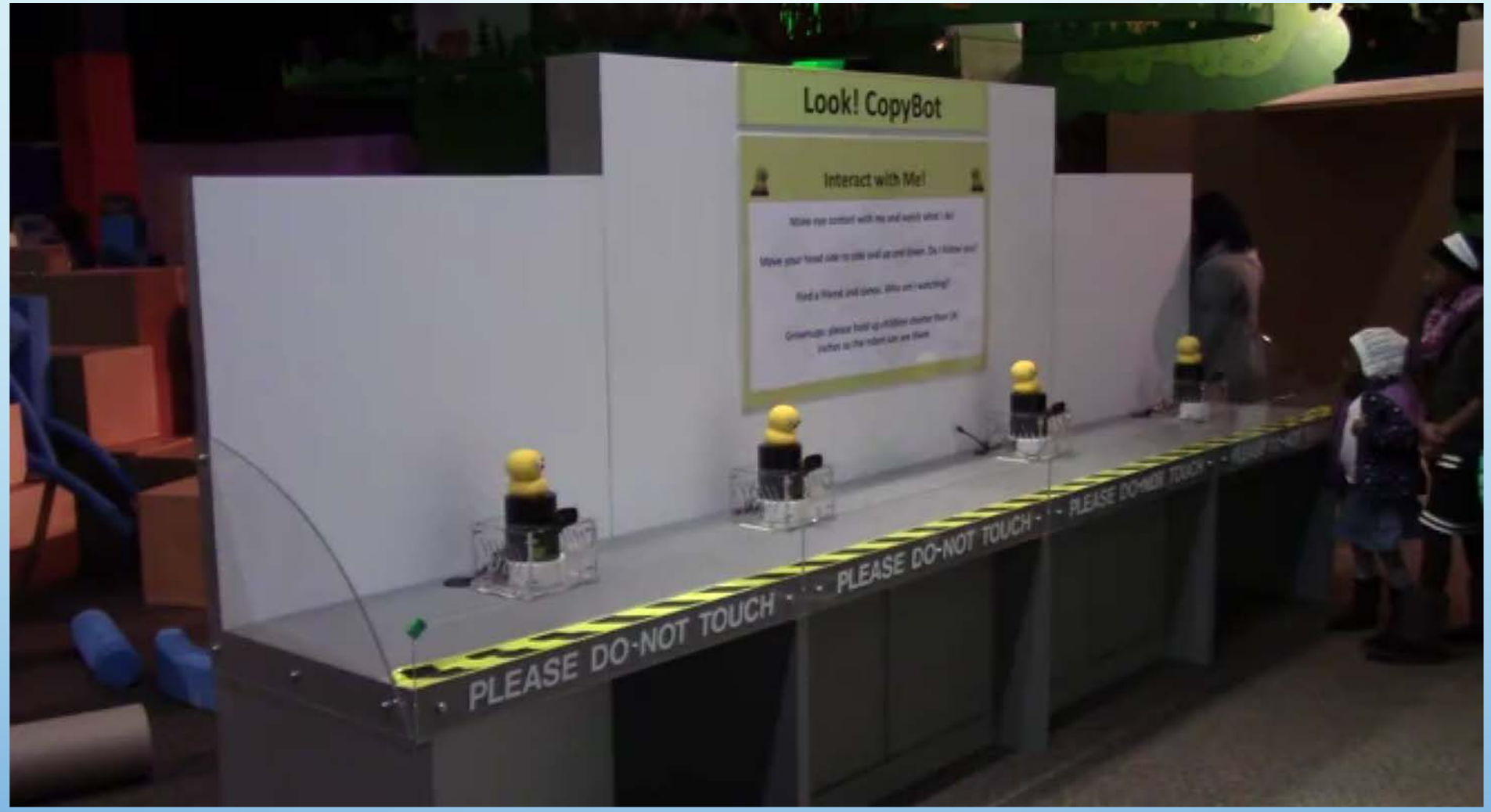



Side


Front


Back

# LIGHTS…CAMERA…ACTION



# THREE WEEKS LATER…
# THE EXHIBIT WAS REMOVED

VALUABLE LESSONS LEARNED BY OUR TEAM

- CHILDREN *WERE INTERESTED* AND *WANTED* TO INTERACT

BUT

- MOST CHILDREN *RELIED* ON PARENT INVOLVEMENT TO INTERACT EFFECTIVELY WHICH WAS NOT THE CULTURE OF THE CHILDREN'S MUSEUM
- EXHIBIT WOULD HAVE BEEN MORE SUCCESSFUL AT MUSEUM FOR OLDER KIDS

CHILDREN'S MUSEUM LEARNED WHAT ROBOTICS EXHIBIT NOT TO USE

# What Did Our Team Forget?

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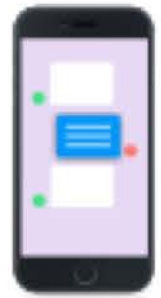
## Join by Text



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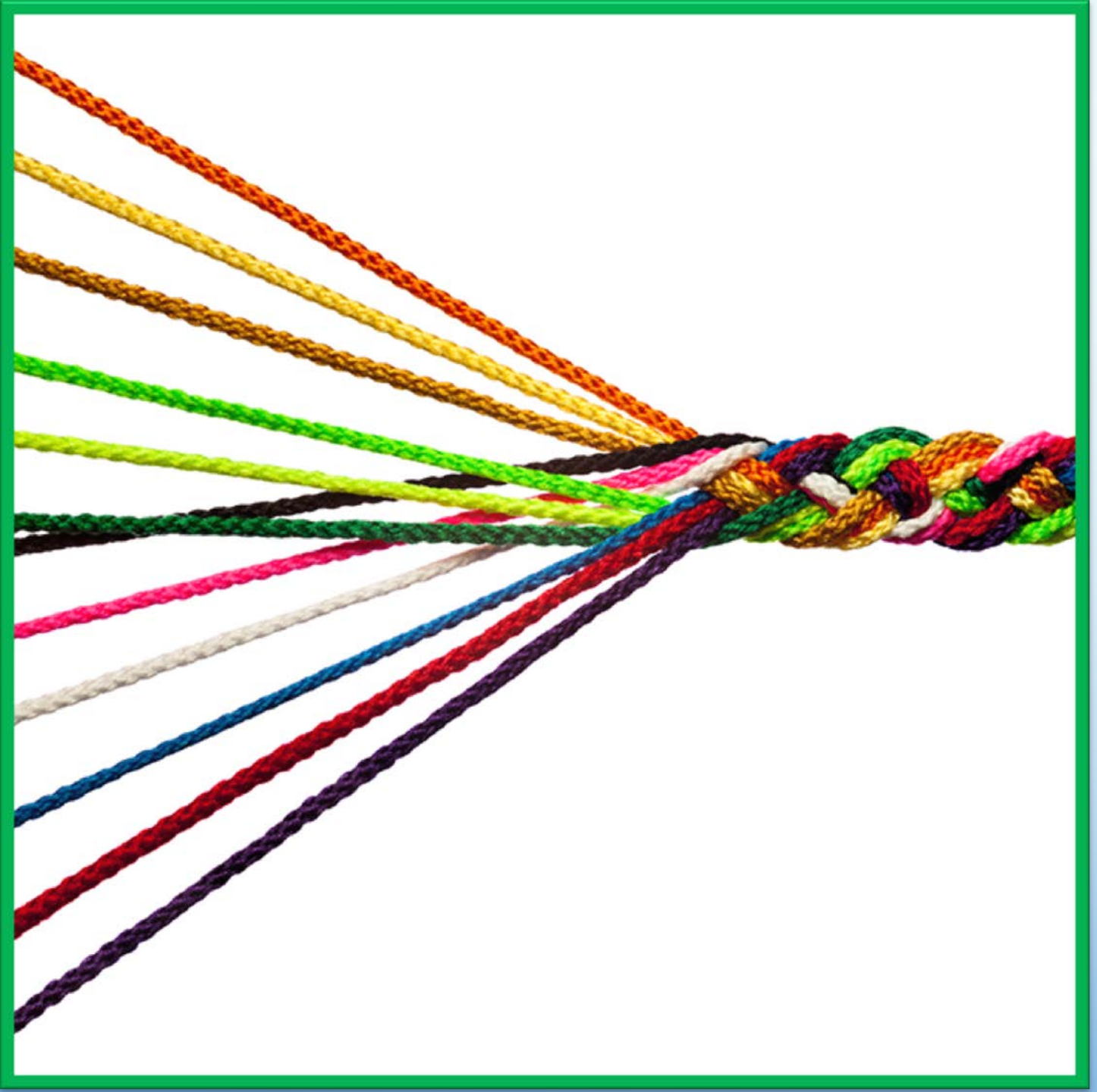
Total Results: 0

# USER EXPERT WAS NOT INCLUDED DURING THE PLANNING PROCESS

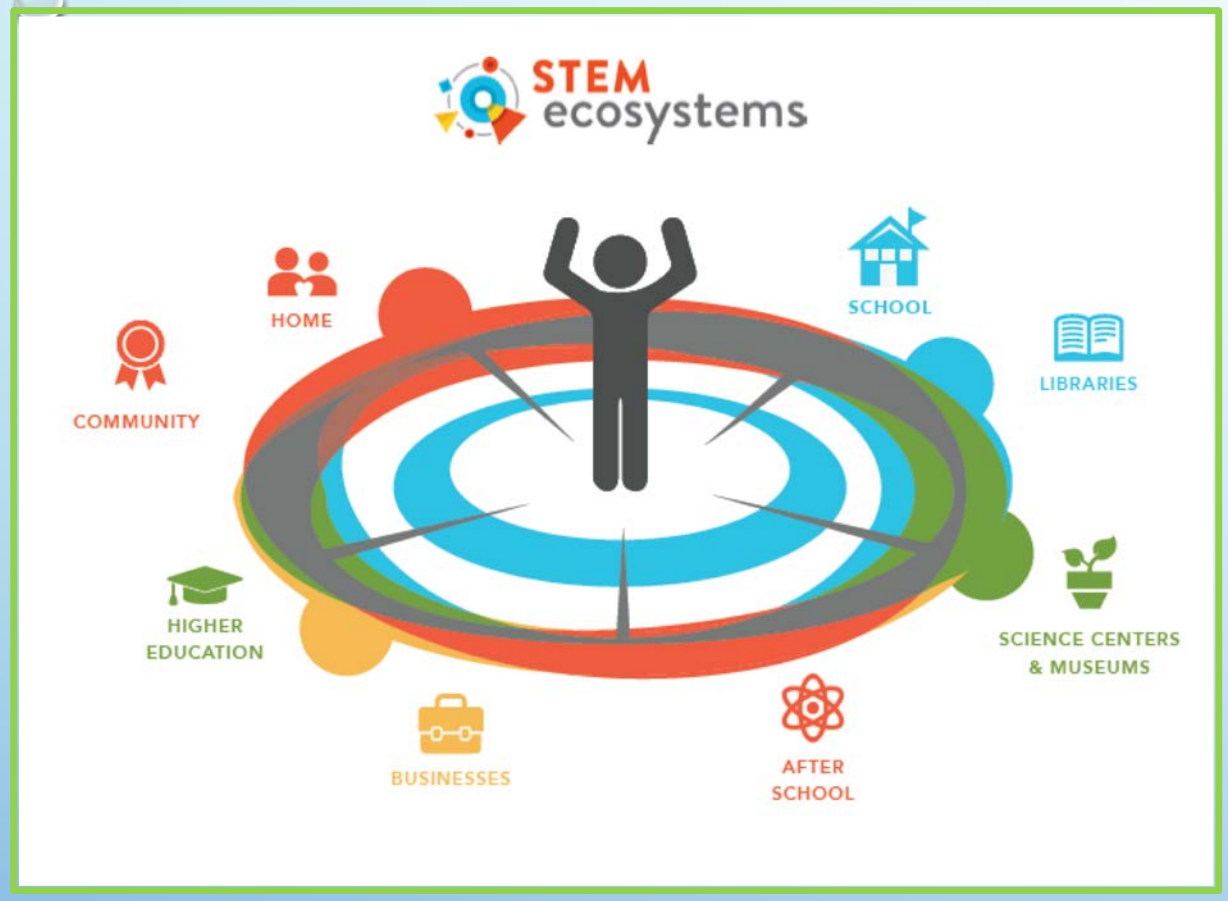


# HOW TO DEVELOP SYNERGISTIC, EXTERNAL PARTNERSHIPS

STEM-NM is a network of organizations throughout New Mexico working together to expand equity in and access to educational STEM experiences in order to prepare youth for jobs in our local science, technology, and health care sectors.

STEM-NM is one of 83 designated STEM ecosystems around the world.

The STEM ecosystems international community of practice is supported by the STEM Funders Network.




# STEM Learning Ecosystems Framework

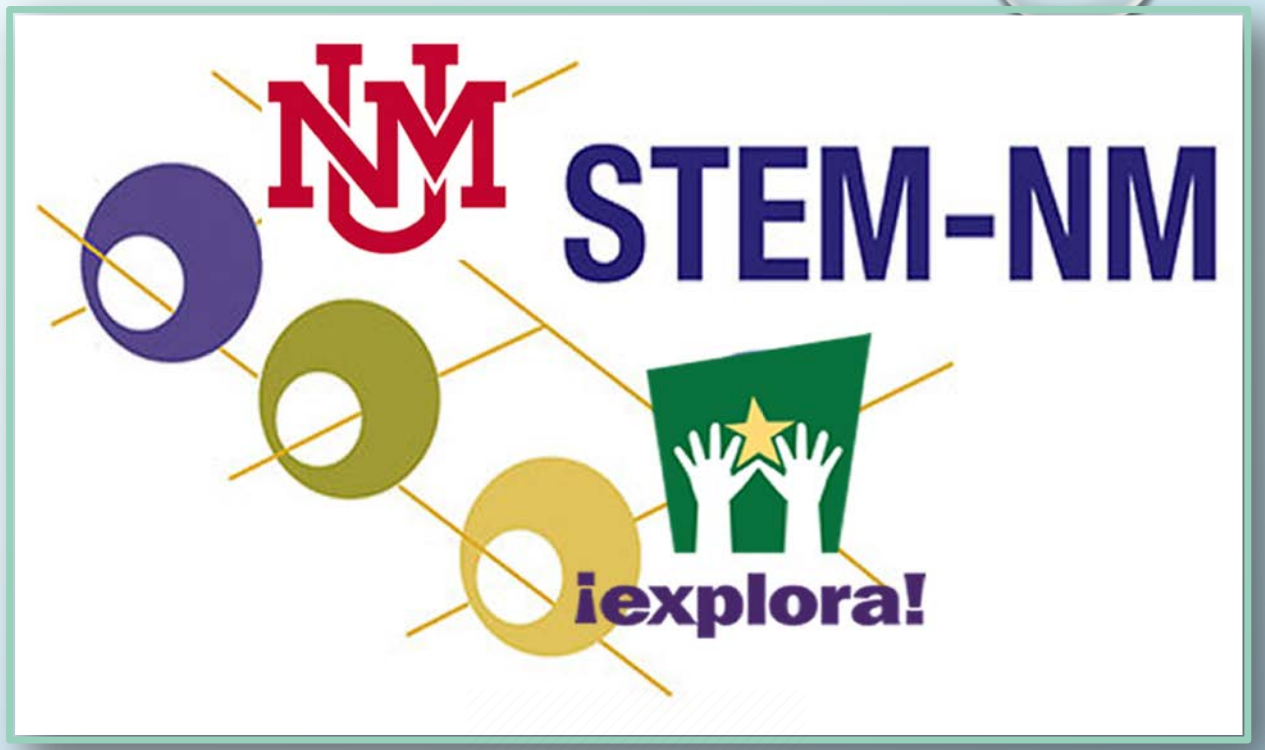
**STRATEGY 1.**
CULTIVATING CROSS-SECTOR PARTNERSHIPS

**STRATEGY 2.**
CREATING AND CONNECTING STEM-RICH LEARNING ENVIRONMENTS

**STRATEGY 3.**
EQUIPPING EDUCATORS

**STRATEGY 4.**
SUPPORTING YOUTH PATHWAYS

# PARTNERING WITH EXPLORA & THE STEM NM ECOSYSTEM

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# THE FRDO-EXPLORA PROCESS

1. STAKEHOLDERS (EXPLORA, FRDO, RESEARCHER) MEET TO DISCUSS RESEARCH AND NEEDS
2. WE IDENTIFY EXISTING PROGRAMS THAT FIT OR DESIGN NEW PROGRAMS
3. WE CO-DEVELOP THE BI NARRATIVE AND BUDGET
4. FURTHER DISCUSS PROGRAM NEEDS AND EXECUTION

IT ALL STARTS WITH A LOGIC MODEL…

# DEVELOPING A LOGIC MODEL

| Inputs | Outputs/Activities | Outcomes |
| --- | --- | --- |
| Needed to make actions happen | Actions/What you do to reach your outcome | What you want your audience to take away |
| - Stakeholders<br>-$$$<br>-Venue<br>-Participants | -Host Workshop<br>-School Outreach<br>-Museum exhibit | -Intended Results |

# TAKING THE NEXT STEP

- PLANNING YOUR BROADER IMPACTS WORKSHOP
  - AT EXPLORA
  - MONDAY, OCTOBER 14, 2019
  - 1:00-4:00PM
- NSF CAREER COHORT STARTING AGAIN IN NOVEMBER
- COMMUNICATING SCIENCE – NSMS 595

# WE'RE HERE TO HELP

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