



# Connecting STEAM to Real-World Challenges

Training to Go

# Session Objectives



- Use the design thinking process.
- Identify real-world challenges facing our community.
- Describe the relationship between STEAM projects and community partners.
- Prepare a specific “ask” for community partners.



# STEAM Project Process

Design thinking is a nonlinear, five-step process:

- Empathize
- Define
- Ideate
- Prototype
- Test

# Real-World Challenge



- This real problem can have a real solution.
- The problem offers the possibility for multiple solutions.
- The problem aligns with grade-level STEAM standards.

# Identifying a Real-World Challenge



- It's present/visible in students' lives.
- It can be fully or partially addressed within the time and resources available to the program.



## What real-world challenges have you and your students used?

- Littering at school
- Excessive water use
- Backaches from carrying book bags

# Examining Our Community



In our community, what are some real-world challenges in which our students could engage?





# Real-World Connections

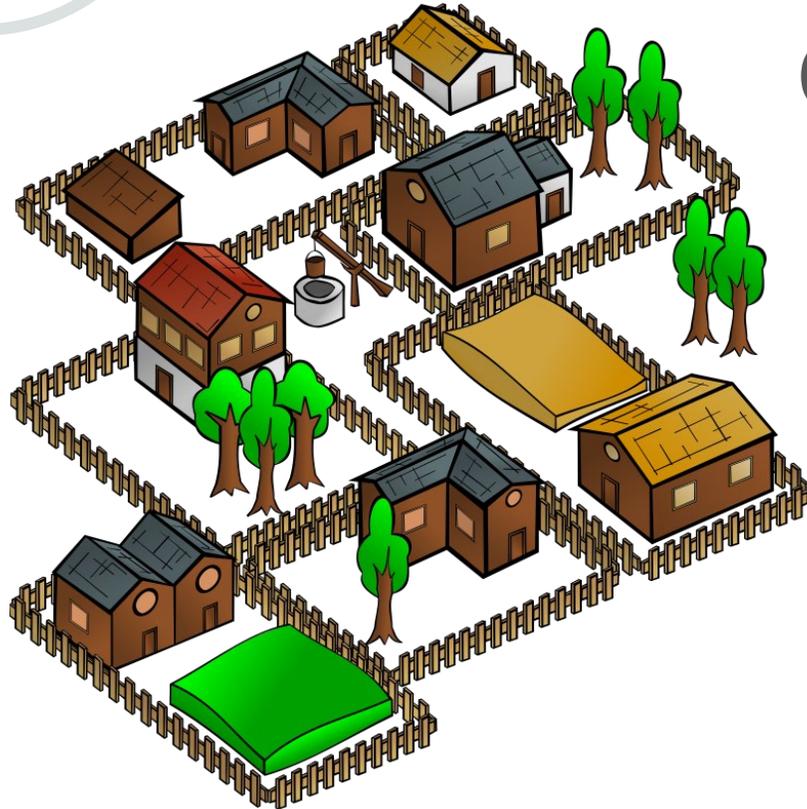
- Connect with an external person.
- Use authentic tools.
- Connect with assessors.

# Connect With an External Person





# Community Resource Map Example



Community Organizations

Local Institutions

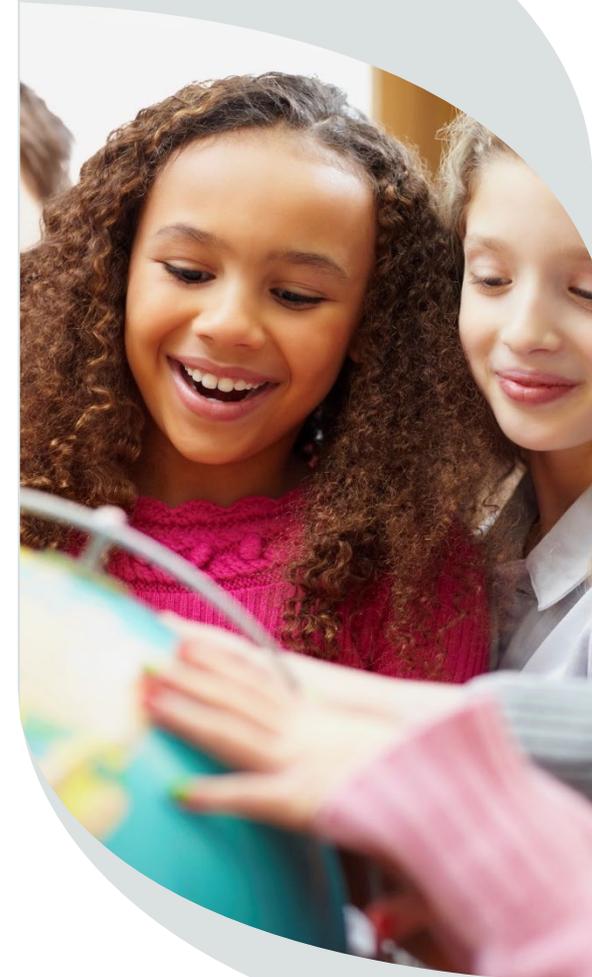
Individuals

Local Businesses

# Who?

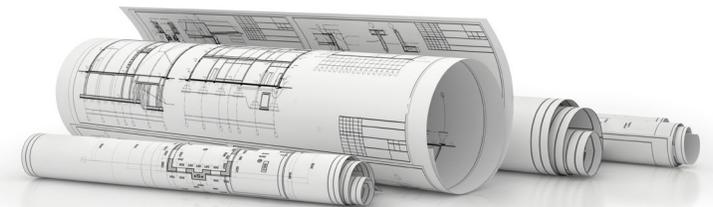
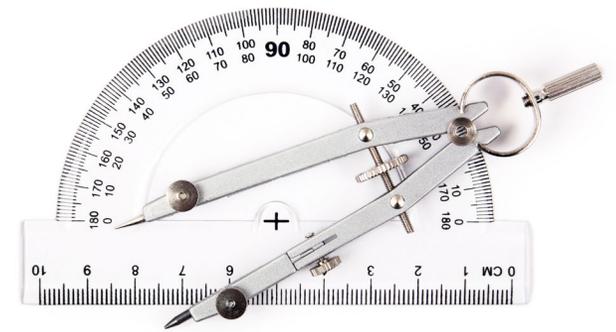


Challenge	Possible External Person
Littering at school	
Excessive water use	
Backaches from carrying book bags	





# Use Authentic Tools



# Which?



Challenge	Authentic Tools
Littering at school	
Excessive water use	
Backaches from carrying book bags	





# Connect With Assessors



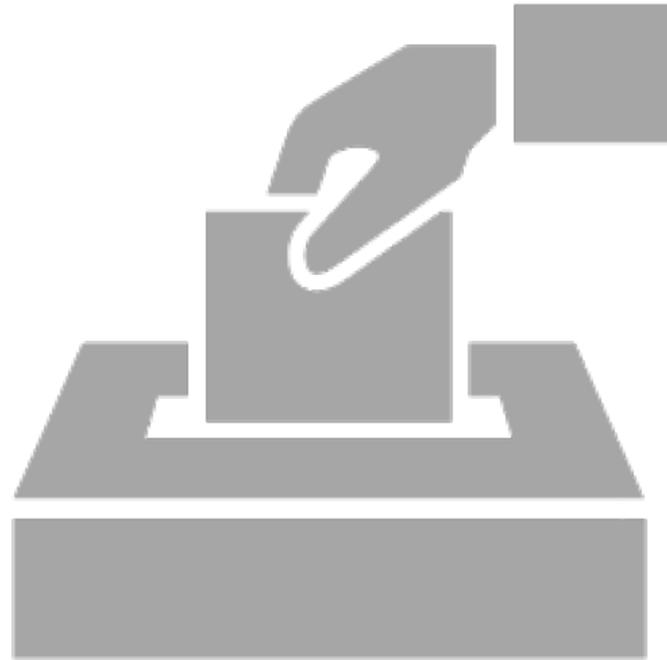
# Who?



Challenge	Assesors
Littering at school	
Excessive water use	
Backaches from carrying book bags	



# Vote



# Next Steps



- Decide which projects you'll start with, based on the vote.
- Consider how you'll get student buy-in.
- Decide what other information the team needs to prepare.