



# Fostering STEM Identity in Elementary Aged Students

**The Works Museum**

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MINNDEPENDENT Conference

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# The Works Museum

## Our Mission:

To inspire the next generation of innovators, engineers, and creative problem solvers.



## We do this through:

- Field Trips
- Family Engineering Nights
- Camps
- Events
- Birthday Parties



# Agenda

## **We're here to share Identi-beads with you!**

- What is our Identi-beads tool? How do we use it in our camps?
- How is it working for us?
- Explore our identity categorizing Framework

## **Together, we will:**

- Brainstorm identities for your classroom
- Share identities
- Build your own Identi-beads tool for your classroom
- Share logistics for classroom use

# What is the Identi-beads tool?

We use Identi-beads in camp:

- Introduced at the beginning of the week
- Identity language is used by educators throughout week
- Campers reflect and choose beads at the end of every day
- Campers take home their necklace at the end of the week

## IDENTI-BEADS

### **RED - Persister**

I didn't give up even when it was hard.

### **ORANGE - Trier**

I tried something new.

### **YELLOW - Helper**

I assisted someone who needed help.

### **GREEN - Designer**

I made a plan for what I was going to do.

### **BLUE - Creator**

I built something.

### **PURPLE - Problem Solver**

My design had a problem and I figured out how to solve it.

### **PINK - Improver**

I found a way to make it better.

### **BLACK - Resetter**

I helped make sure our space was reset for the next activity or next day.

### **WHITE - Listener**

I used my listening skills while teachers or other campers shared.

### **BROWN - Calmer**

I calmed myself when I got frustrated.



*Camp Educator, Cal, passing out beads to campers.*

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# What Our Educators are Saying:



*“Identi-beads helps me focus on the recovery from challenging behaviors and gives me a concrete way to pick out something good from every kid’s day.”*

- Anne, Summer STEM educator and classroom teacher

# What Parents are Saying:

*“My son had been having some difficulties at other camps and, so far as I know, he had none at The Works camp.*

*I liked that there was positive emphasis on staying calm and being persistent.*

*We are going to incorporate identi beads at home.”*

- Camp parent

*“The beads were really great and allowed us to know how to continue to praise our child specifically for the ways they challenged themselves or succeeded in camp that day”*

- Camp parent

# Framework Overview



## **Citizenship & Belonging**

Identities that help students build a positive classroom community that runs smoothly

## **Resilience & Effort**

Identities to support personal improvement and growth mindset

## **Self & Others**

Identities that help students navigate emotions and relationships

## **Knowledge & Skills**

Identities connected to school subjects and academic goals





# Move into Grade-Level(ish) Groups

# Work Together:

## Divide The Works' Identi-beads into the Framework!

<b>Citizenship &amp; Belonging</b> Identities that help students build a positive classroom community that runs smoothly	<b>Resilience &amp; Effort</b> Identities to support personal improvement and growth mindset
<b>Self &amp; Others</b> Identities that help students navigate emotions and relationships	<b>Knowledge &amp; Skills</b> Identities connected to school subjects and academic goals

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# The Framework is a way to balance your Identi-bead categories

*However, it is just a GUIDE.*

Tailor your Identi-beads to best suit  
you and your students' needs.

The goal of our Framework is to help  
balance identities out rather than  
force them into boxes.

# Brainstorm identities for your own classroom!

1. Brainstorm identities in small groups on post-its to add to the framework
2. Tour the room and pull from others ideas
3. Begin building your classroom's identities list

# Brainstorm identities for your own classroom!

- What type of *learners* do you want to see in your classroom?
- What type of *people* do you want your students to be?
- How do you want your students to *interact with each other* and with you?
- Does your school already have a school-wide *Social/Emotional Learning curriculum* or other system for introducing *Positive Character Traits* this could be combined with?



# Here's What it Takes

## ***Materials:***

- beads
- pipe cleaners
- cardstock  
*(optional)*



## ***Monthly cost per student:***

- 16 cents per 20 beads
- 2 cents per pipe cleaner
- \$0.18 per student per month

**\$5.40/month for class of 30**

# Digital Resources

After the session, we will be emailing you:

- These slides
- The Works Museum's Identi-beads poster
- The Works Museum's small Identi-bead cards (for students)
- **Editable templates of both of these files**
- Month tags