

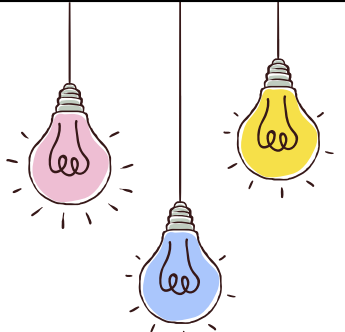


# Unlocking Gifted Creativity in the Classroom:

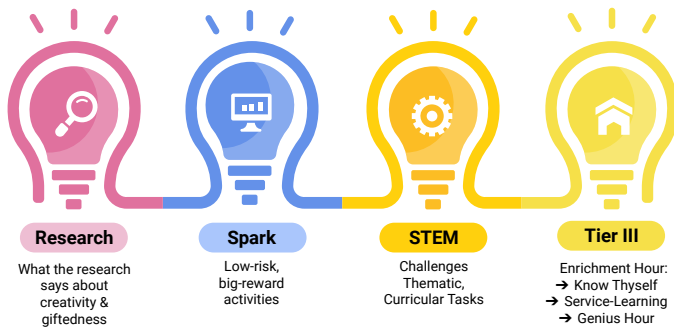
Day 2: Curricular Tasks & STEM

Nicole Belden 2023:  
UConn Confratute

## Goals

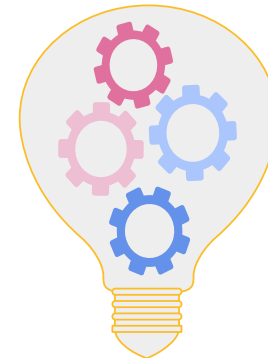
- 1 Leave with a list of ideas for implementing low-risk, STEM-based creative tasks in your classroom
  - 2 Have a framework for the implementation creative challenges
- 

## Overview



## STEM/STEAM

STEAM is an approach to learning and development that integrates the areas of science, technology, engineering, art, and mathematics.



“STEAM education approach increased both the figural and verbal creativity scores of the students”

(Ozkan & Umdü Topsakal, 2021).



## Read Alouds to Introduce STEM

1



**The Most Magnificent Thing**  
Ashley Spires

2



**What Can You Do with an Idea?**  
Kobi Yamada

3



**Rosie Revere, Engineer**  
Andrea Beaty

4



**Izzy Gizmo**  
Pip Jones

## Shoestring Budget STEM



Materials



Build



Reflect

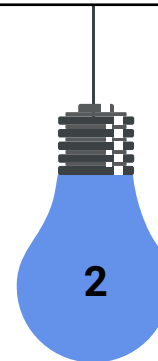
## Shoestring Budget STEM

### Materials List

- recyclables
  - Cardboard boxes & tubes
  - containers
- wish list (to families & district)
  - Batteries
  - plastic storage containers
  - Duct tape
  - Masking tape

## Shoestring Budget STEM

- Pull-Out Quarter Focus
  - Engineering Challenges
- Push-In Curricular Tasks
  - Interdisciplinary Units (ELA/SS/Science)



Build



Build:  
A Long Walk to  
Water

## **Shoestring Budget STEM: Interdisciplinary Challenge**

What opportunities for creativity and collaboration are present in the novel?

What science and/or social students are presented in the novel?

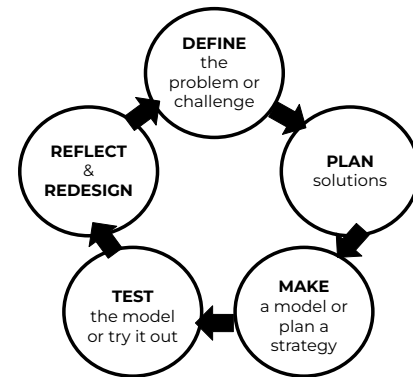
What engineering ideas are presented in the novel?

<https://twitter.com/MomentBulb/status/1564362740931518469?s=20>



Build

## **Problem-Solving Process**



Build:  
**Lesson Flow**

## **STEM Challenge**

- Entry Event: Notice & Wonder
  - Video clip
- Challenge announced - materials & limitations
- Individual Design Time
- Visible, Random Groupings
- Group Collaboration & Worktime
- Curveball
- Reflection

## **Mars Descent Vehicle Challenge (MDV)**



## Learning Targets

I will be able to use critical thinking and problem-solving skills to complete the challenge.

I will be able to work collaboratively with my team to complete the challenge.

## STEM Challenge Helps/Hurts

### Not Helpful

- Interrupting others
- Not trying/No effort/Not contributing
- Not communicating with group
- Being disrespectful
- Ignoring group members
- Dominating the group
- Having side conversations

### Helpful

- Listening to group members
- Cooperating
  - Talking to one another
  - Working together
  - Staying with the group
  - Getting along with group members
- Sharing all ideas
- Being kind
- Staying on-task
- Open to new ideas
- Respecting others' ideas
- Accepting and giving constructive criticism
- Accepting and giving feedback

## ENGINEERING DESIGN PROCESS



## Mars Video: Thinkpad Notice and Wonder





## Challenge #1: Mars Descent Vehicle (MDV)

### Background:

Landing on Mars is tricky. A lander headed to Mars might go up to 13,000 miles (21,000 kilometers) per hour. To land gently, these spacecraft need to slow down before touching the surface to keep the astronauts safe.

## Challenge #1: Mars Descent Vehicle (MDV)

In this challenge, you will design and build a lander that will protect two "astronauts" when they touch down.

Your team will follow the engineering design process to design and build a **shock-absorbing system** out of simple materials; and improve your design based on the results of your test landings.

## Design

### STEM Challenge Planning Sheet

Ask: What is the problem that needs to be solved?

---

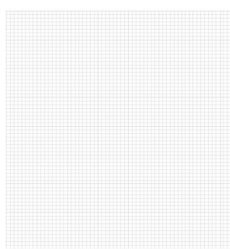
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Imagine: What are possible solutions?

---

---

Plan: What will your design look like? Draw a diagram taking into consideration the materials your team has been given.



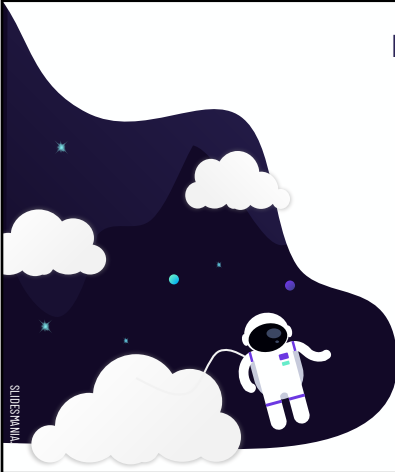
## Visible Random Groupings

## Design

Using the STEM Challenge planning sheet, work with your group to create a design for your MDV.

Take into consideration the materials you will be given.

You can only use these materials when creating your group's MDV that has shock-absorbing properties to protect your astronauts.



## Curveball:

Your team's MDV must survive being dropped from several different heights (chosen by the teacher).



## Thinkpad Debrief:

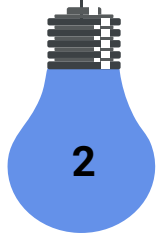
How did you and your group think like engineers during this challenge?  
Give specific examples.



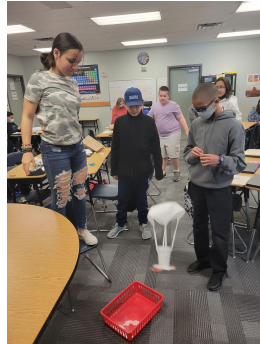
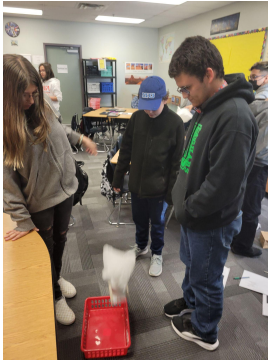
How were courage and/or perseverance shown in this Mars Challenge?



## Shoestring Budget STEM



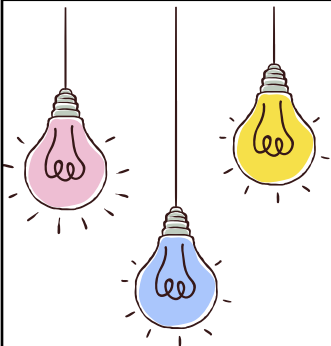
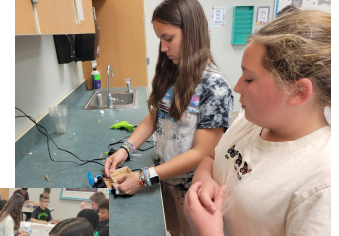
Build: Mars  
Descent Vehicle



## Shoestring Budget STEM



Build:  
Mars Rovers



### the creative process:

1. This is awesome!
2. This is tricky.
3. This is terrible.
4. I am terrible.
5. This might be ok.
6. This is awesome!
7. I am awesome!

## Shoestring Budget STEM



Build: Lightning Thief





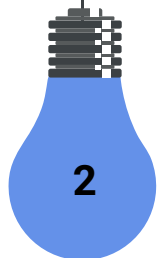
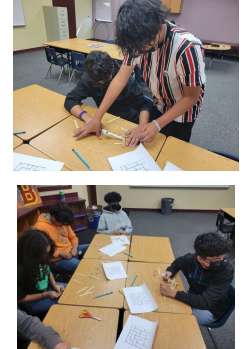
### Pull-Out Stand Alone Challenges Grades 3-8

- 45-60 minutes
- Stand alone tasks under the theme
  - ◆ Thinking like an Engineer
  - ◆ STEM Challenge
  - ◆ Space Challenges
- Low prep, bulk materials
- Materials prepped, sorted, and portable



### Pull-Out Stand Alone Challenges Grades 3-8

Build: Pull-Out



### Push-In Creativity Challenges

- 30-45 minutes
- Stand alone tasks under the theme of Creative Thinking
- FFOE Focus



### Push-In Creativity Challenges

- 1/27 - Creativity Challenge: Loose Parts
- 2/03 - Critical Thinking Challenge: Aces, Jumble, Zilch
- 2/17 - Creativity Challenge: Draw Starts
- 2/24 - Creativity Challenge: Circuits
- 3/10 - Creativity Challenge: Origami
- 3/24 - Critical Thinking Challenge: Analogies & Forced Analogies
- 3/31 - Creativity Challenge: Origami
- 4/14 - Critical Thinking Challenge: Rebus Puzzles
- 4/21 - Creativity Challenge: Loose Parts #2
- 4/28 - Critical Thinking Challenge: Circle Logic Puzzles
- 5/5 - Creativity Challenge: Re-Do of Loose Re-Do (Day #1)

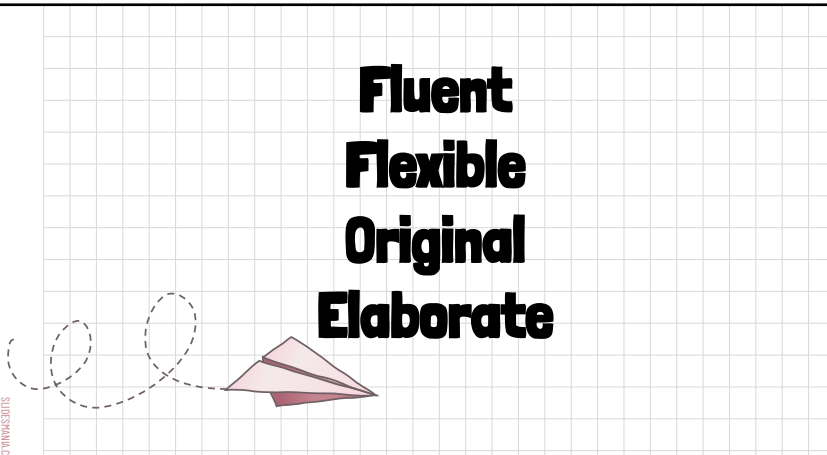


## **Creativity Challenge: Loose Parts**



## **Learning Targets**

- I will be able to think fluently to brainstorm ideas.
- I will be flexible in my thinking to complete the task.
- I will be able to elaborate on my ideas to complete the task.



## **Fluent Flexible Original Elaborate**



## **Warm-Up**

Wouldn't it be great if my \_\_\_\_\_, could  
\_\_\_\_\_.

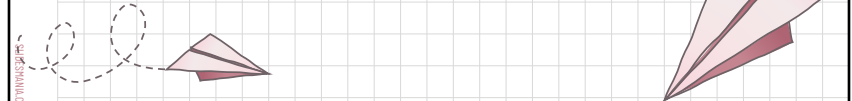
## Warm-Up

Wouldn't it be great if my **pencil**,  
could **be activated by my voice**.



## Warm-Up

Wouldn't it be great if my \_\_\_\_\_, could  
\_\_\_\_\_.



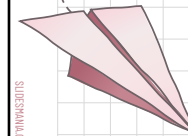
## Creativity Challenge: Loose Parts

Using only the provided materials,  
create something that solves a  
problem.



## Think Time: Fluency & Flexibility

- **Brainstorm**
- **Sketch**



# Create

Using only the provided materials, create something that solves a problem.

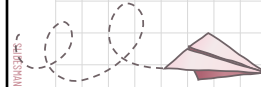


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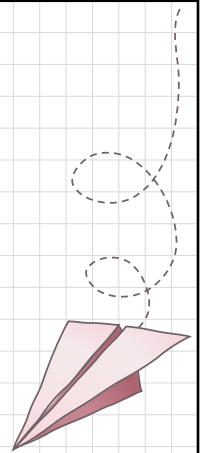
## Gallery Walk

Looking with only your eyes, what problem did your peers solve?

How did they solve it?

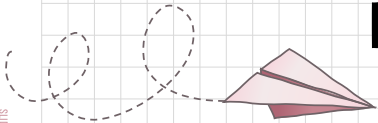


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## Exit Ticket

**FFOE: What did you use and how?**

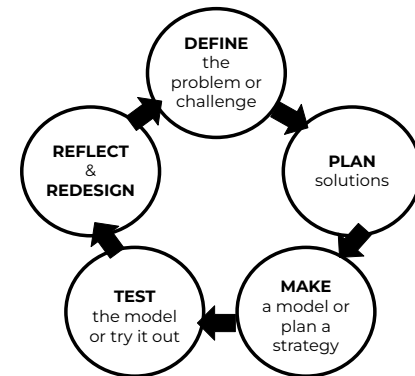


SLIDEWINK.COM

## Problem-Solving Process



Reflect







Reflection

### Shoestring Budget STEM

1. What was the problem or challenge?
2. How did you plan solutions, and who did you plan with?
3. What did you do to make a model or plan a strategy?
4. When you tested your model or tried out your strategy, did it work? What happened?
5. Take a moment to reflect on what went well and what you would change if you did this challenge again.



### District Wide Gifted Family Nights

→ 3 times a year



### Questions?





# Thank You



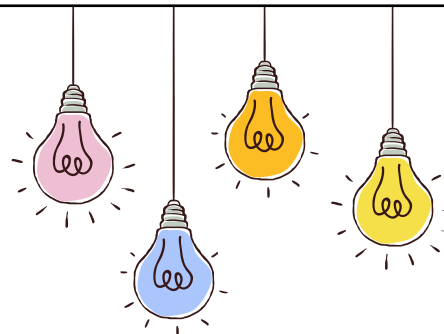
nbelden@besd33.org



@MomentBulb



@BESDGifted



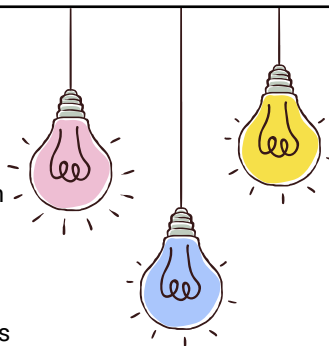
## Unlocking Gifted Creativity in the Classroom:

Day 3: Enrichment Hour Tier III Tasks

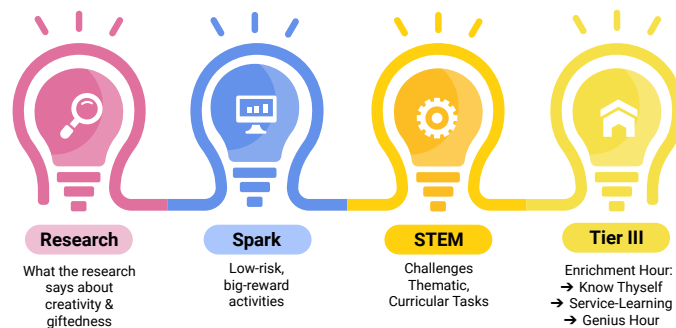
Nicole Belden 2023:  
UConn Confratute

### Goals

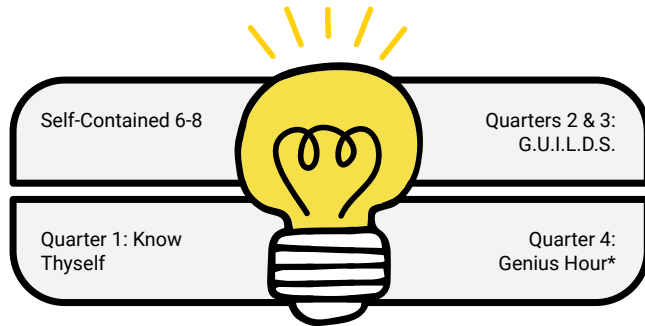
- 1 Leave with a list of ideas for implementing creative tasks in your classroom
- 2 Have a framework for the implementation of Tier III tasks



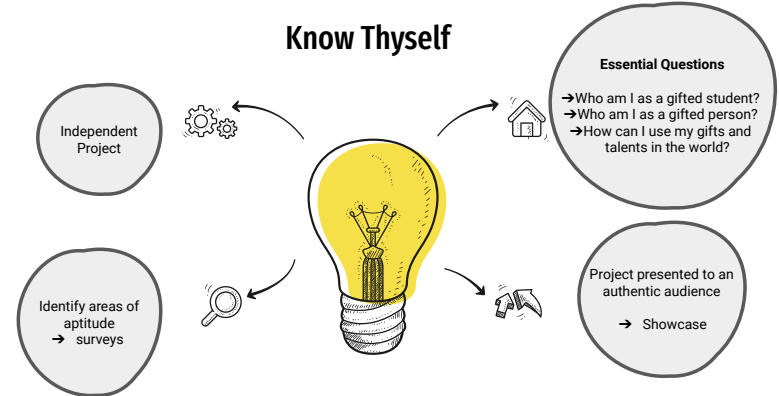
### Overview



## Tier III



## Know Thyself



## Final Product for Showcase #1

- At least 3 Choice Menu Components
- Visual: ½ Trifold displaying choice menu products
- Speaking: 1-2 minute talking points, expectations for professionalism

## Areas of Focus

As a student, as a person, and for the future:

- What are your interests?
- What do you like about yourself that you're going to nurture this year?
- What about yourself do you know needs work? What work will you do this year?

# Choice Menu for Visual Component

1. Resumé
2. Advertisement
3. Book Cover for your Autobiography
4. Brochure
5. Recipe for Your Success

Pick 3!

## Know Thyself Enrichment Hour Components' Choice Menu

### Resume

Create a resume that includes an objective (a sentence that summarizes the information you gathered from the surveys and interview), your education thus far, aspirations for high school and after high school, awards, activities/hobbies, skills, and at least three references. Your resume must be created using your computer. Grammar and spelling must be correct.

### Advertisement

Create an advertisement about yourself that showcases your skills, aptitudes, and any information that would be important for a future endeavor (a job, entrance into a college, etc.). Your advertisement of yourself must be on at least a 8.5" by 11" piece of paper with a slogan about yourself. There must be a color sketch or photo of yourself that includes your traits/attributes from the surveys you completed. This may be handwritten or created on the computer. Grammar and spelling must be correct.

### Book Cover

Create a book cover for your (fictional) autobiography. Your front cover must include: title, author (your name), and an image. The inside flap must include a paragraph summary of information from your surveys and interview. The back inside flap must have a brief autobiography about yourself with at least five details. The spine of the cover must include the title and your name. Grammar and spelling must be correct.

### Brochure

Create a three-fold brochure using at least 8.5" by 11" paper. The front fold must have a title and picture. Your brochure must contain a combination of text, graphics and/or photos. The information from your surveys and interview must be in paragraph form with at least five facts. An autobiography should be included as well. You may create your brochure by hand or using the computer. Grammar and spelling must be correct.

### Recipe for Future Success

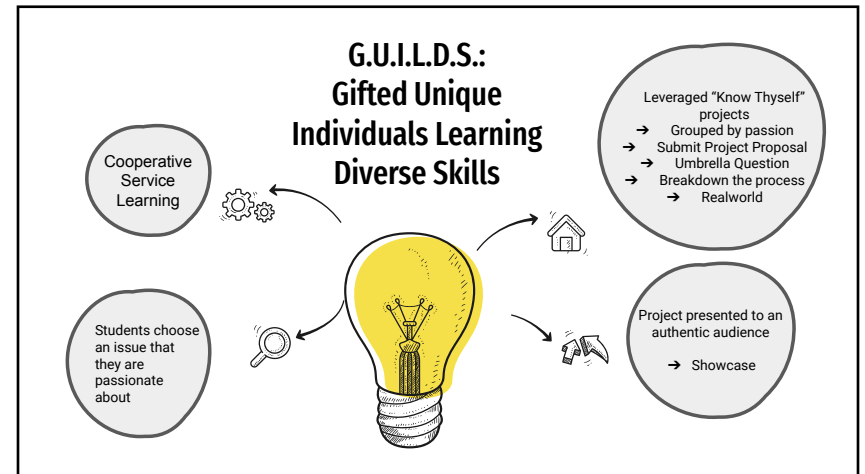
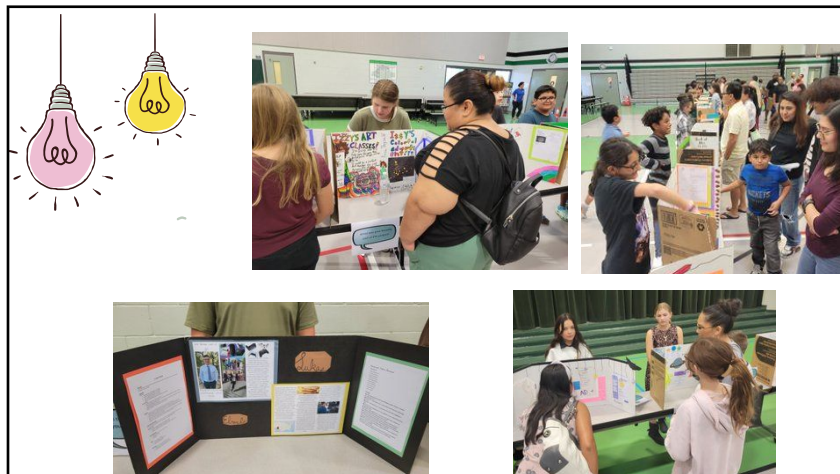
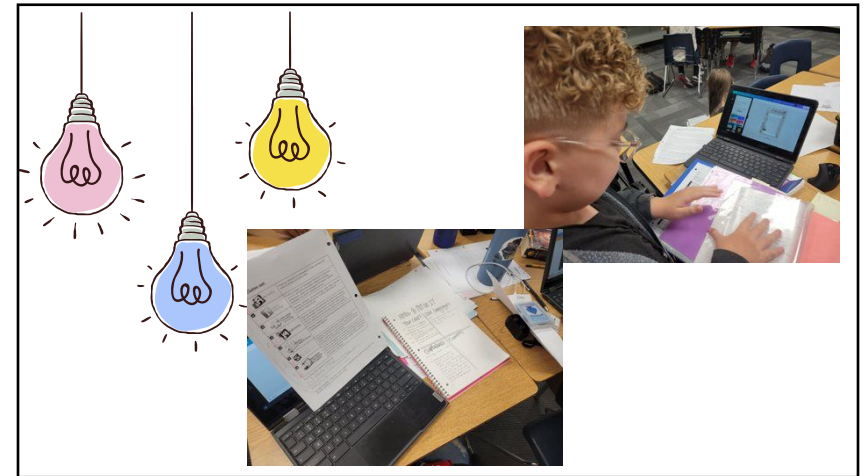
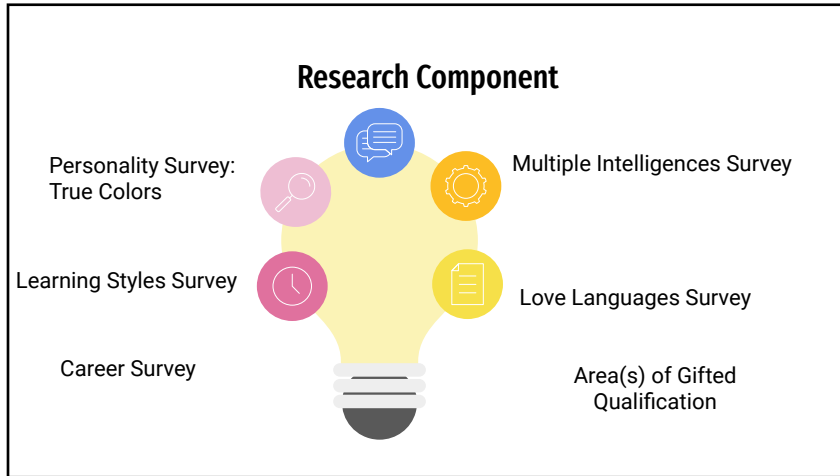
The recipe for your future success can be handwritten or typed on an 8.5" by 11" piece of paper. You must include a list of ingredients with a measurement for each. A numbered list of steps explaining the process to create your personal success must also be included. Grammar and spelling must be correct.

# Expectations for Speaking Component

1. Words are clear, concise, and at a consistent volume
2. Appropriate eye contact
3. Professional and appropriate body language
4. Well organized and logically sequenced
5. Well-timed (didn't end early, didn't go long)

## LU Enrichment Hour Rubric

Criterion	YES/NO	How I know that is... (What is my evidence?)	Self-Reflection (I still need... Next time I will...)
I have recognized my <b>interests</b> (NAGC 1.1, Self-Understanding).			
I have recognized my <b>strengths</b> (NAGC 1.1, Self-Understanding).			
I have recognized my <b>cognitive needs</b> (NAGC 1.1, Self-Understanding).			
I have recognized my <b>social-emotional needs</b> (NAGC 1.1, Self-Understanding).			
I accepted <b>feedback</b> from my peers.			
I used the <b>feedback</b> from my peers to refine my project.			
My <b>driving question</b> is relevant to my chosen topic (Summit Learning).			
My <b>driving question</b> is researchable. (Summit Learning).			
My <b>driving question</b> helped me to build on disciplinary knowledge about the topic (Summit Learning).			
<b>Habit of Success: Self-Direction</b> I showed self-direction because I needed little to no help working during Enrichment.			
<b>Habit of Success: Perseverance</b> I was able to bounce back when things didn't go my way.			
<b>Habit of Success: Self-Efficacy</b> I believed I could create a product of interest to share with the public.			



## Service Learning

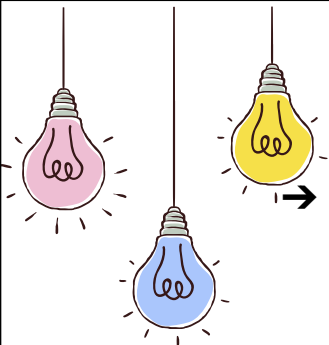


According to Soslau and Yost (2007) "It is critical that educators understand that **service learning is a viable instructional strategy** that not only involves students in solving problems in their communities but as a vehicle for learning. Students who are actively engaged in their own learning **take ownership** of it and thus are **more motivated to learn**" (p. 52).

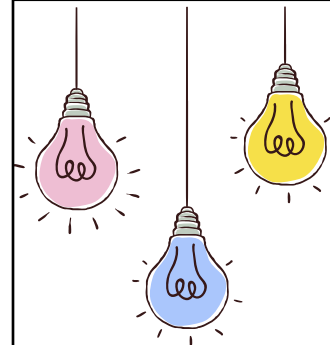


## NAGC Standards

- 1.4.2. Educators identify outside-of-school learning opportunities and community resources that match students' interests, strengths, and needs.
- 3.1.7. Educators integrate a variety of technologies for students to construct knowledge, solve problems, communicate and express themselves creatively, and collaborate with others in teams locally and globally.
- 3.6.2. Educators use school and community resources to support differentiation and advanced instruction appropriate to students' interests, strengths, and academic learning needs.
- 4.2.3. Educators assess and provide instruction on psychosocial and social and emotional skills needed for success in school, their community, and society.
- 4.4.3. Educators provide structured opportunities to collaborate with diverse peers on a common goal.
- 5.4. Collaboration. Students with gifts and talents are able to continuously advance their talent development and achieve their learning goals through regular collaboration among families, community members, advocates, and the school.



- **4 C's:** Communication, Collaboration, Critical Thinking, & Creativity
- Global Empathy
- ◆ How can we be changemakers?



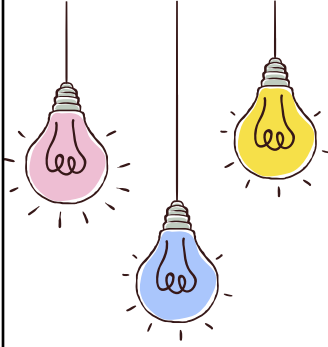
## Kick-Off

- 6th grade video: Kansas City, MO, 7th grader created a Rubik's Cube for visually impaired people.
- 7th/8th: Ted Talk (Vacya Tipa) - Service Learning and the Power of One



→ What are you passionate about?

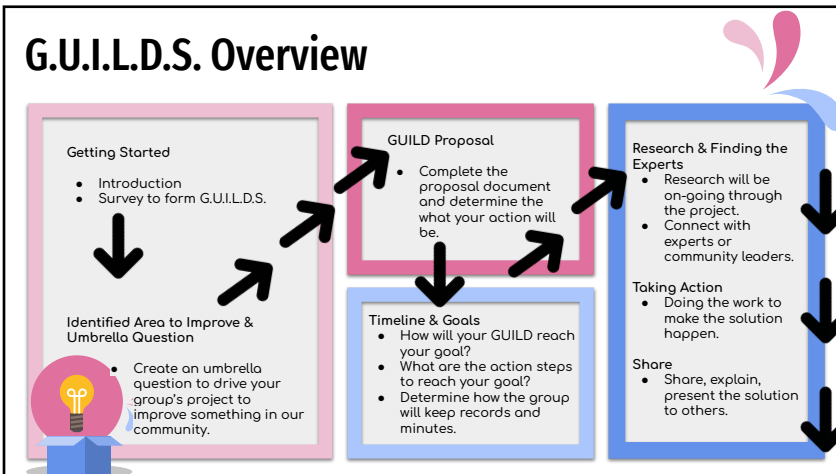
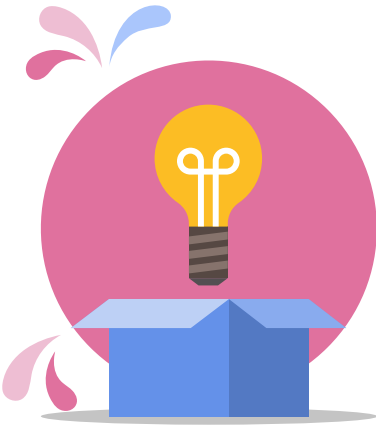
→ What changes do you feel need to be made in our community?



**Groupings based on interest - 3 members**

**What is our timetable?**

**What are the action steps?**

**Conscious Empathy**



## CONSCIOUS EMPATHY

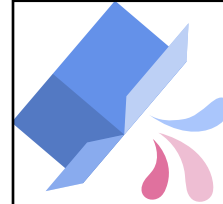
Being aware of and sensitive to the feelings, thoughts, and experiences of others in a way that guides you to contribute to the good of all.

### DEFINITION



### HOW IT RELATES TO CHANGEMAKING

The kind of empathy used in changemaking is called **conscious empathy**. Understanding others' feelings, perspectives, and experiences provides a person with the insight required to tackle injustice around them. Noticing problems and inefficiencies, and empathizing with those who experience them, are the first steps in the changemaker journey.



# Reading Focus

“At an extraordinary Olympics, acts of kindness abound”

Reading Focus: How did the people in the article show conscious empathy?

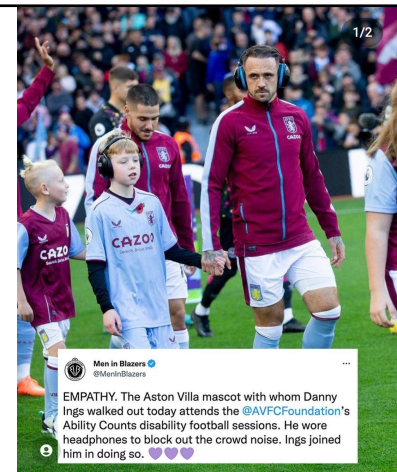
## High Jump & Conscious Empathy

**Video Focus:**  
What are the  
actions of a  
person with  
conscious  
empathy?



## Conscious Empathy

How does this show  
conscious empathy?

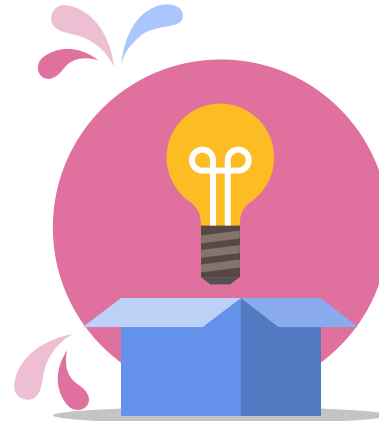




### **Graffiti Protocol:**

**How can we use conscious empathy  
within our GUILDS projects?**

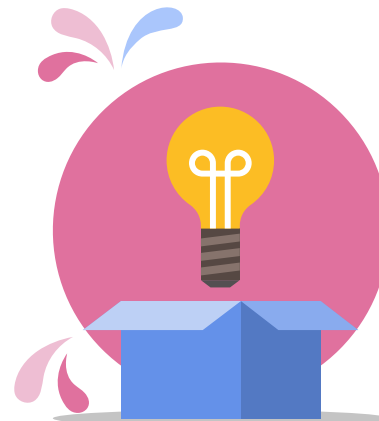
Paper, each student gets their own color of marker, draw/write & talk



**Pre-Community  
Service  
Attitudes Survey**



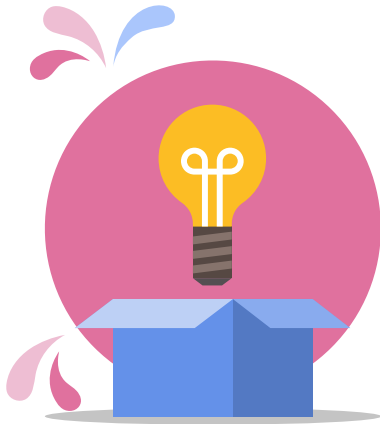
**What aptitudes & strengths did you  
identify during your 'Know Thyself'  
Project?**



**My Way Survey**

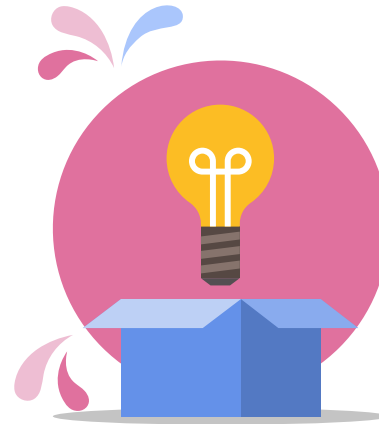
**How can we  
leverage your  
strengths during  
GUILDS?**





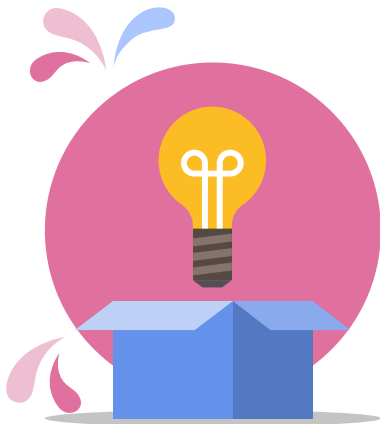
## **Jasinski Survey Data**

**What are the  
needs of our  
community?**



## **G.U.I.L.D.S. Groupings**

**What are you  
interested in?**



## **Umbrella Question Mini-Lesson**



**Based on your group's aptitudes  
from the Career Survey, what  
issue need can your GUILD  
identify and problem solve?**

From here you will identify a need in our school or in the  
community needs to be addressed.



**Example:**

**Graphic Design GUILD**

**Need: Hallway Signage**

**There are no hallway signage in our school to designate grade levels or the Learning Unlimited hallway.**

### **Drafting an Umbrella Question to Drive Your GUILDS' Work:**



What is the school/community problem you want to solve?



What is the big question that will drive our research to help our school/community?



What action do we need to take to reach our goal?



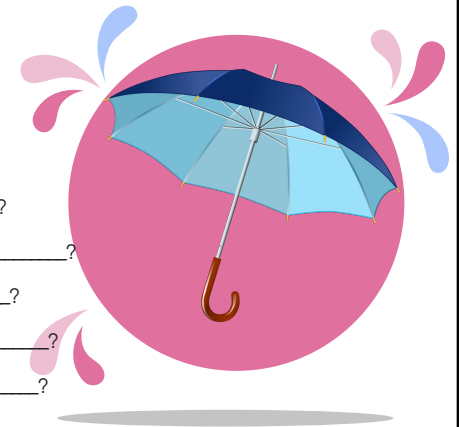
**Example:**

**Graphic Design GUILD**

**Umbrella Question: How can the Graphic Design GUILD make improvements to our Jasinski community?**

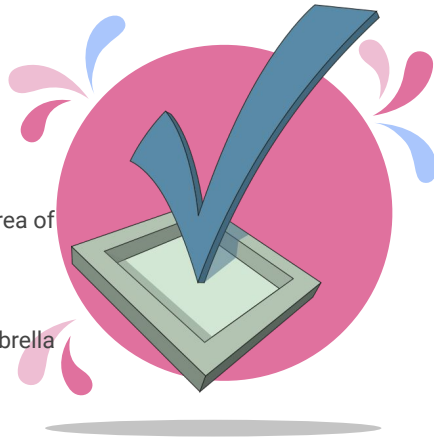
### **Umbrella Question Stems**

- How can \_\_\_\_\_ improve \_\_\_\_\_?
- How can \_\_\_\_\_ be applied to \_\_\_\_\_?
- How can \_\_\_\_\_ change \_\_\_\_\_?
- How would you design a new \_\_\_\_\_?
- How does \_\_\_\_\_ affect \_\_\_\_\_?



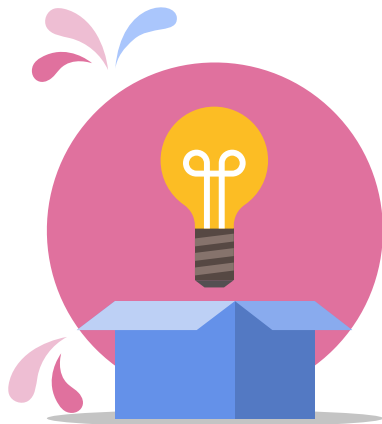
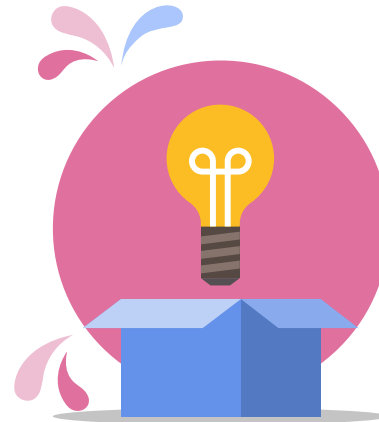
## Completion Check

- ☐ My GUILD has identified an area of need in our community
- ☐ My GUILD has created an umbrella question



## Action Steps Mini-Lesson

Notice & Wonder with the example



**Action:**  
Doing the  
work to make  
the project  
happen

**In order to reach your  
GUILD'S goal, what are  
your action steps?**

What will your GUILD commit to so that you are successful in your endeavors?



## What is the deliverable?

What do you plan to create to share your information?

What will reflect the achievement of your GUILD goal?

What will show that your GUILD answered your umbrella question?



## Example: Graphic Design GUILD Action Steps

1. Research school signage - compile a digital photo album
2. Design stencils for room numbers and grade levels.
3. Decide locations for the signage
4. Research material costs and make a list
5. Submit approval for changes to hallways to Principal with areas of change outlined with mock-ups.
6. Have Jasinski students and teachers vote and use most popular design
7. Submit to Principal list of supplies (paints, brushes, stencils)
8. Research school program signage
9. Design LU Hallway signage
10. Have LU teachers, administrators, and LU students vote on design
11. Submit for principal approval

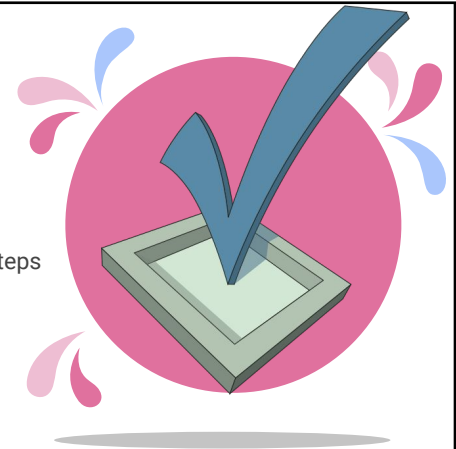


Create your GUILD's Action Steps based on the community need your GUILD has identified.



## Completion Check

- ☐ Completed Draft of Action Steps





## Proposal Mini-Lesson

### Write & Submit

\*Revisions may be  
necessary

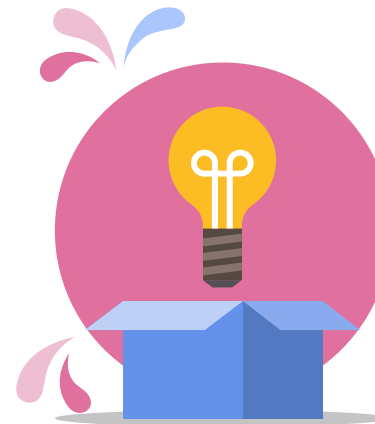
Working with your GUILD, complete the proposal sheet:



- What is your GUILD's umbrella question?
- What is your GUILD's end goal?
- What action steps will your GUILD need to take to reach your end goal?
- What positive results does your GUILD see as the outcome of your GUILD?

## Completion Check

- ☐ Proposal Sheet completed
- ☐ Proposal Sheet submitted for approval



## GUILD Weekly Meetings Mini-Lesson

## How will your GUILD handle:



- Record-keeping so that everyone can refer back to the information in the future?
- Where will your meeting record be housed?
- Who will be responsible for taking the notes?

## From Action Steps to Smaller Agenda Items



### Action Steps



### Agenda Items

According to your GUILD's proposal, what are the action steps?

What are all of the pieces that need to be addressed for each of the steps in your proposal?

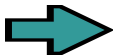
## From Action Steps to Smaller Agenda Items



### Action Steps

Example:

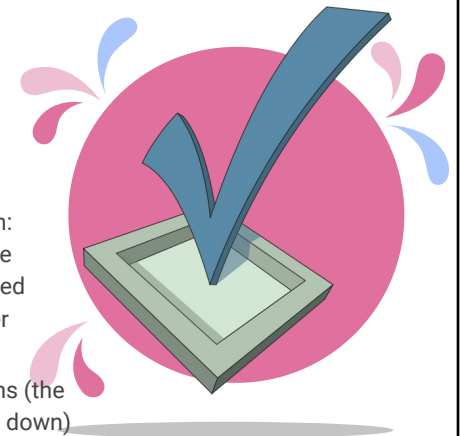
Find an expert on environmentalism to interview.



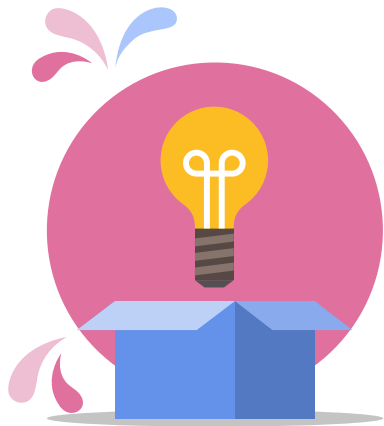
### Agenda Items

1. Assign tasks to GUILD members.
2. Search environmentalists in Arizona.
3. Compose email for teacher to send to multiple experts asking for an interview.
4. Write interview questions to help research.
5. Follow-Up with teacher about emails.
6. Set-Up a day and time for the interview.
7. All GUILD members present and taking notes day of the interview.

## Completion Check



- ☐ Your GUILD has agreed upon:
  - ☐ Record keeping procedure
  - ☐ Where notes will be housed
  - ☐ Who will be the note-taker
- ☐ Your GUILD has agenda items (the tasks that have been broken down)



## Expectations of GUILD Members

### What are your GUILD Meeting expectations?

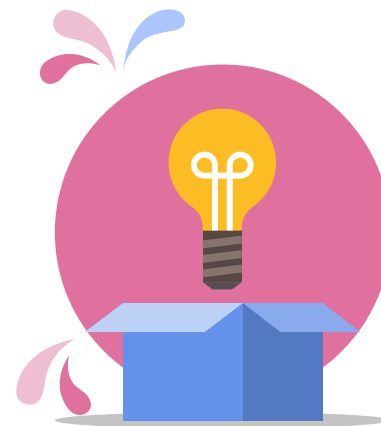
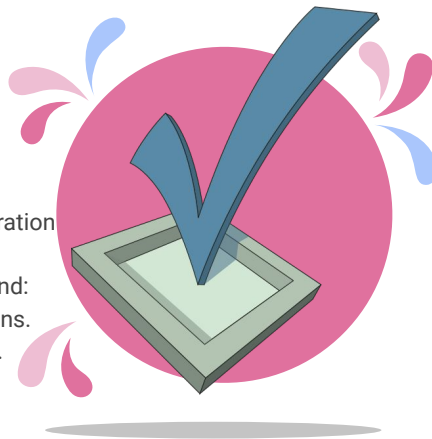


- Attendance
- Delegating work
- Materials to bring to the meeting
- Attitude of GUILD members
- What happens when there is a conflict?

Remember your GUILD will meet only on Mondays for 10-15 minutes to set a plan for the week and make work assignments.

## Completion Check

- ☐ The GUILD Norms of Collaboration have been surfaced.
- ☐ All GUILD Members understand:
  - ☐ their individual expectations.
  - ☐ The GUILDS' expectations.



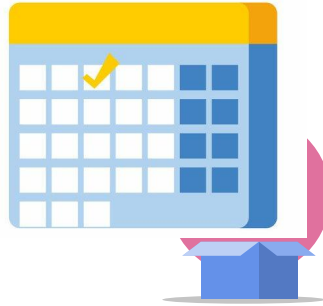
## Timeline & Organizing Goals

## GUILD Calendar

### Long-term planning:

How many days will you have this quarter to work on your GUILD project?

How many Monday meetings will your GUILD need to plan for?



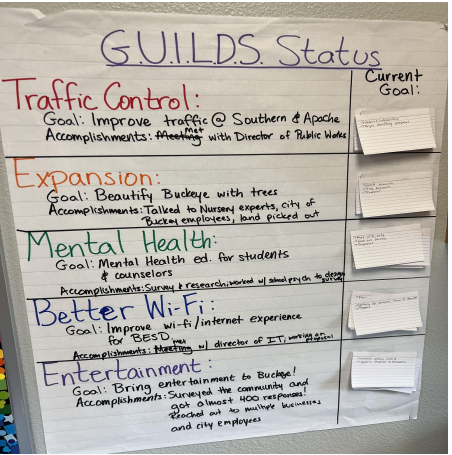
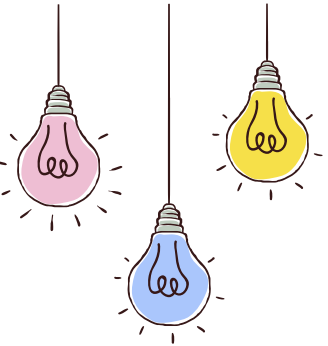
## GUILD Calendar

### Short-term planning:

What is your GUILD's goal for this week?

What are the small steps to get there?

Who is responsible for which part?



**GUILDS Status**

**Traffic Control:**  
Goal: Improve traffic @ Southern & Apache  
Accomplishments: Meeting with Director of Public Works

**Expansion:**  
Goal: Beautify Buckeye with trees  
Accomplishments: Talked to Nursery regarding city of Buckeye employees, land picked out

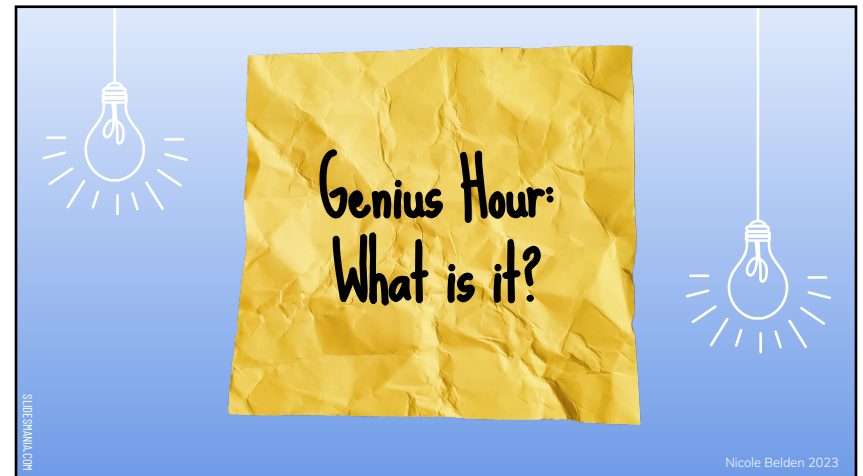
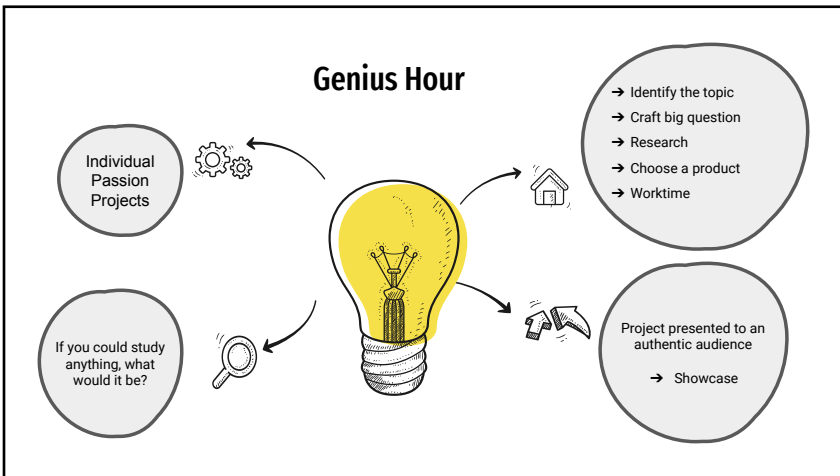
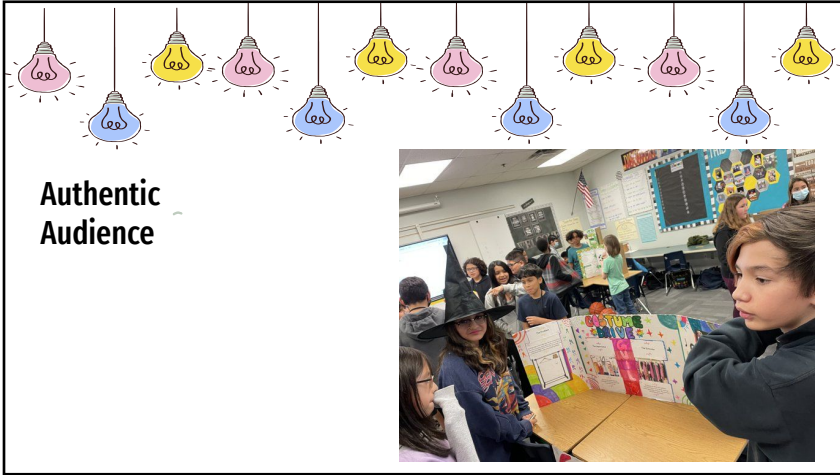
**Mental Health:**  
Goal: Mental Health ed. for students & counselors  
Accomplishments: Survey & research, interview of school principal, city design

**Better Wi-Fi:**  
Goal: Improve wi-fi/internet experience for BEST  
Accomplishments: Meeting w/ director of IT, survey of city

**Entertainment:**  
Goal: Bring entertainment to Buckeye!  
Accomplishments: Surveyed the community and got almost 400 responses! Reached out to multiple businesses and city employees









Origins

# Google 3M

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## A Project by Any Other Name . . .

- 💡 Genius Hour
- 💡 Passion Projects
- 💡 20 Time
- 💡 Passion Pursuit





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## Passion Projects / Genius Hour:

- 💡 project-based
- 💡 promotes learner autonomy
- 💡 student-interest driven
- 💡 teaches executive functioning





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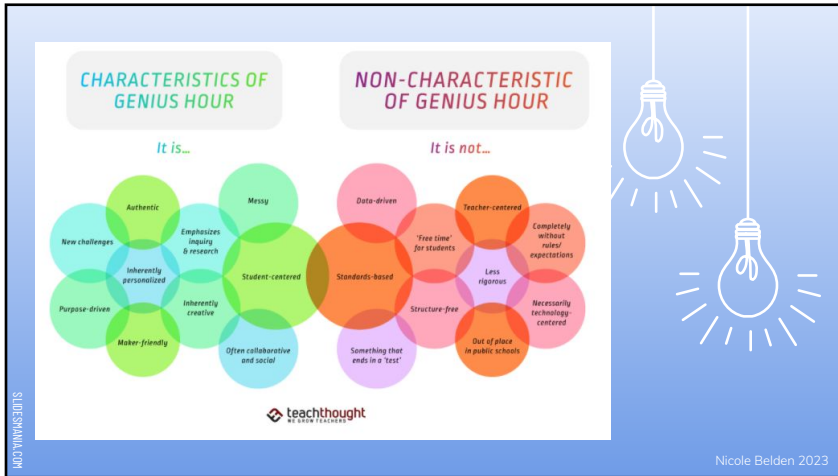
## Rules

1. You have to research something.
2. You have to make something.
3. You have to present something.



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# NAGC STANDARDS

1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and needs

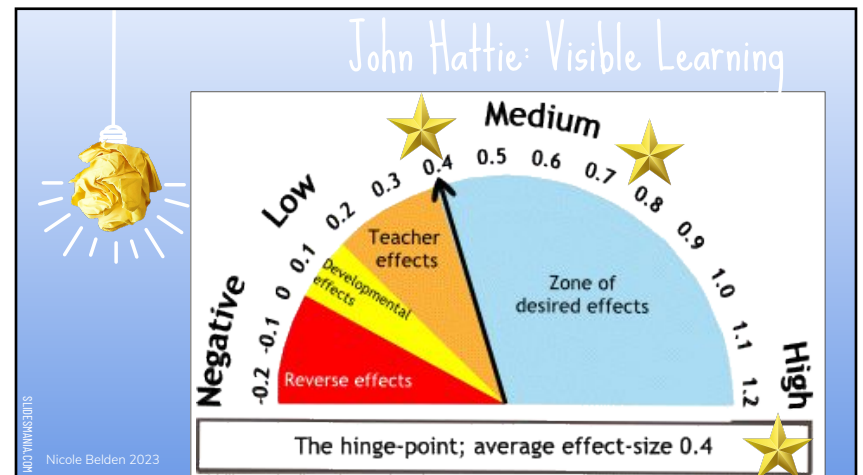
1.3.1. Educators use evidence-based instructional and grouping practices to allow students with similar gifts, talents, abilities, and strengths to learn together, and also create opportunities for students to interact with individuals of various gifts, talents, abilities, strengths, and goals.

1.3.3. Educators discuss and explain developmental differences and use materials and instructional activities matched to students' varied abilities, interests, and learning needs

3.1.3. Educators adapt, modify, or replace the core or standard curriculum to meet the interest, strengths, and needs of students with gifts and talents and those with special needs such as twice exceptional, highly gifted, and English language learners.

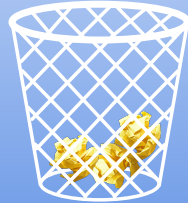
3.2.1. As they plan curriculum, educators include components that address goal setting, resiliency, self-management, self-advocacy, social awareness, and responsible decision making.

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## Outcomes

Reuer (2017) found that there are positive effects on student identity can contribute to **increased student engagement** and **enjoyment** as they **perceive their task as meaningful** (105).



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## Process At-a-Glance:

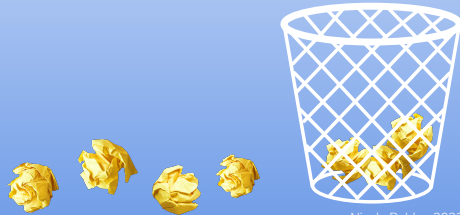
- 💡 Launch It
- 💡 Topic to Driving Question
- 💡 Research It
- 💡 Make It
- 💡 Feedback/Reflect/Refine
- 💡 Showcase to Authentic Audience



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# The Two Things . . .

- 💡 Student-interest driven
- 💡 Organized



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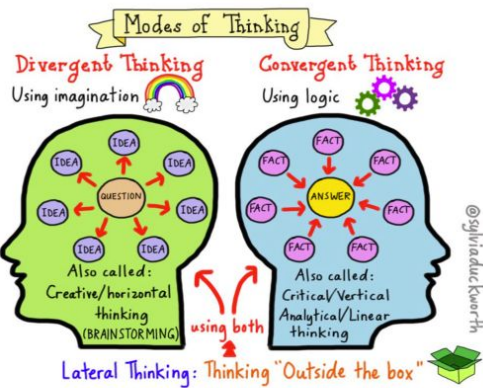
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# Process Focused Endeavor



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Sylvia Duckworth @sylviaduckworth · Jan 28  
New #Sketchnote: Modes of Thinking #edtech #edtech #CreativeThinking cc  
@dougpete

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# LAUNCH



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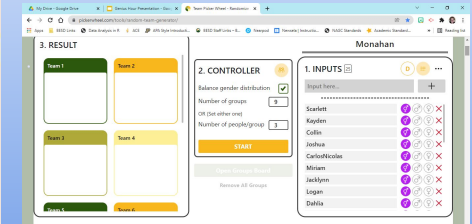
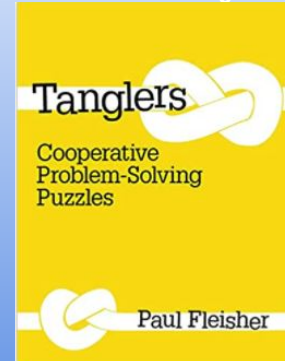


## NORMS of COLLABORATION

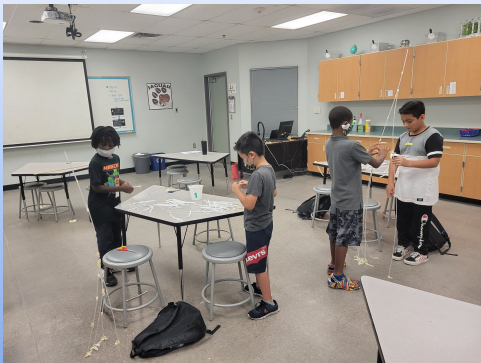
- 💡 An activity that gets students working together
- 💡 Limited time
- 💡 Limited materials
- 💡 Outcome to debrief about

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## Tasks & Visibly Random Groupings

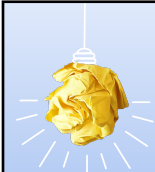


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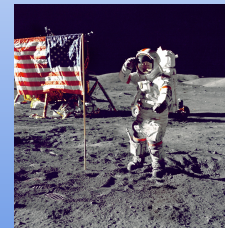
## NORMS Activity: Straw Towers

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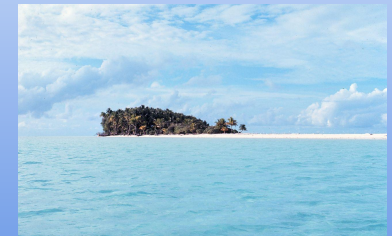


## Other Norms Activities

Stranded on the Moon (NASA)



Stranded on a Deserted Island



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## The Debrief:

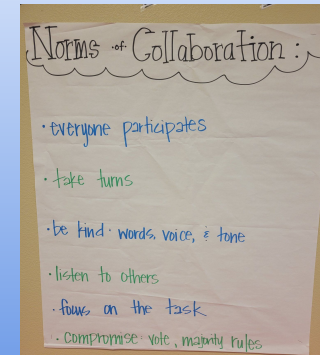
- 💡 What worked as a group? Why?
- 💡 What didn't work? Why?
- 💡 What do we need to do next time?

Teacher scribes and creates anchor chart.

Hung up and referred to at the start of each session.

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## Norms of Collaboration Chart



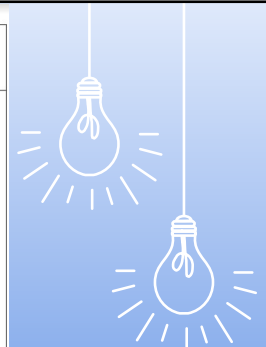
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## Selecting a Topic of Interest

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Things I Love ❤️	Things I Wonder ?	Things I Want to Learn 💡

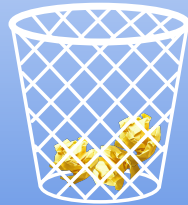


## Graphic Organizer for Brainstorming

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## Example Topics Surfaced from Brainstorming:

- 💡 The impact of Social Media on adolescents
- 💡 The best way to teach trigonometry
- 💡 The importance of the ocean
- 💡 Designer animals - genetics/breeding
- 💡 Why major league baseball is so popular



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## Driving Question

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## The Evolution of a Question



Topic-wide  
range of  
possibilities



Smaller,  
subtopics you  
have  
questions about?



**BIG  
QUESTION**  
yes/no & one  
click questions  
won't work



Giving good  
examples of  
researchable  
question.

Question  
stems



Researchable,  
big umbrella  
question

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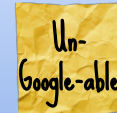
## Topic: Space



SPACE



- 💡 Astronauts
- 💡 Space travel
- 💡 Surviving on other planets
- 💡 Technology



How far  
~~away~~ is  
Pluto?



- 💡 What?
- 💡 Why?
- 💡 How?



What are  
**NASA's next  
steps for  
space travel?**

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## Question Stems

- What are the effects of ... ?
- Why are ... ?
- Why is \_\_\_\_\_ important to \_\_\_\_\_?
- How are ... ?



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## Posting the Driving Questions

### Genius Hour Driving Questions

marine biology  
Why is marine biology important for planet earth?

20th Century History  
What are the most important events of the 20th century? Why?

space  
How will humans travel to other planets? survive?  
Where is NASA planning to explore next? How? Why?  
How do you become an astronaut?

French cuisine  
Why is French food important?

anime  
Why was anime created?  
Why is it important?

Greek Mythology  
Why is Greek Mythology still important today?



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## Posting the Driving Questions

Snakes: Why are venomous snakes important?  
 . animals . medicines . important to people  
 . dangerous . types : where they live

Space: What are NASA's next steps in exploring space beyond the Milky Way?  
 . technology . which planets . astronauts  
 . timeline . impact on humans

Why are the planets different?  
 . names . color . size . composed of  
 . how far away . best planets for humans

How was the universe created? Destroyed?

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## Rubric

Criterion	YES/NO	How I know that is ... (What is my evidence?)	Self-Reflection (I still need ... Next time I will ...)
I have recognized my <b>interests</b> (NAGC 1.1, Self-Understanding).			
I have recognized my <b>strengths</b> (NAGC 1.1, Self-Understanding).			
I have recognized my <b>cognitive needs</b> (NAGC 1.1, Self-Understanding).			
I have recognized my <b>social-emotional needs</b> (NAGC 1.1, Self-Understanding).			
I accepted <b>feedback</b> from my peers.			
I used the <b>feedback</b> from my peers to refine my project.			
My <b>driving question</b> is relevant to my chosen topic. (Summit Learning).			
My <b>driving question</b> is researchable. (Summit Learning).			
My <b>driving question</b> helped me to build on disciplinary knowledge about the topic. (Summit Learning).			
<b>Habit of Success: Self-Direction</b> I showed self-direction because I needed time to no help working during Genius Hour.			
<b>Habit of Success: Perseverance</b> I was able to bounce back when things didn't go my way.			
<b>Habit of Success: Self-Efficacy</b> I believed I could create a product of interest to share with the public.			

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# Time for Research

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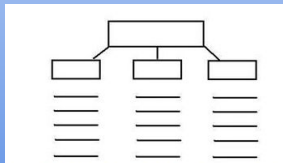
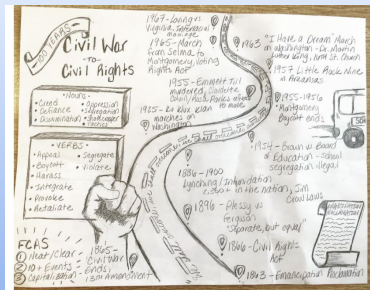
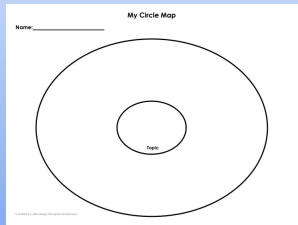
Breaking Down our Topic  
Look for general information the first time.

Refine our searches,  
contact/interview experts, and  
gather resources.



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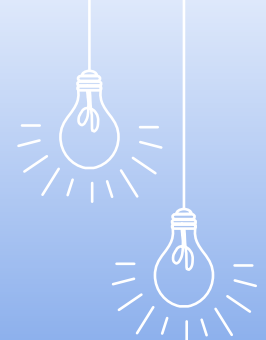
# Organizing Our Thinking



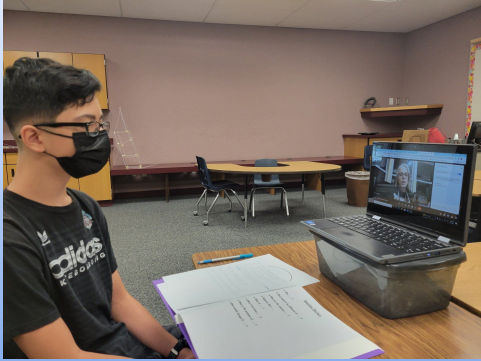
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Interviewing an Expert: Marine Biology



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Paleontological Expert

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School of Earth and Space Exploration

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What's the deliverable?

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Process not Product

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SLIDE 31/ANNA.CUN

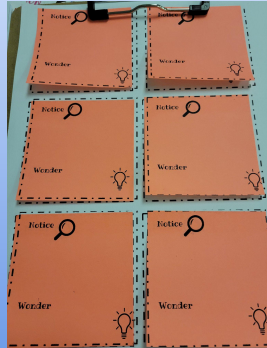
Figure 3.2. Product guidelines

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SLIDE 31/41/01



## Teacher Feedback: Stick & Go



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## Self-Reflection Sheet

- I created this because ...
- This topic is important to me because ...
- My favorite part of my learning experience was ...

**DOUBLE AS PRESENTATION NOTES**

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## Self-Reflection

I chose a trifold to express it in a organized way. I chose the ML B because that is my dream job besides being a salesperson. I like working on it because I was able to learn new things.



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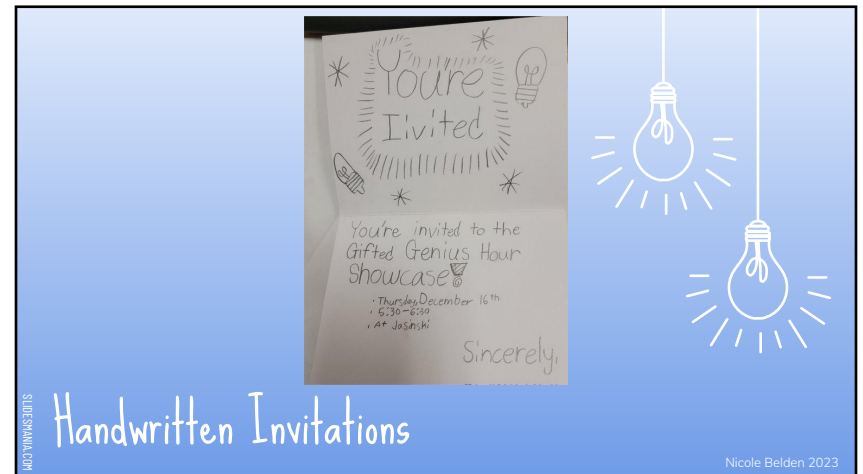
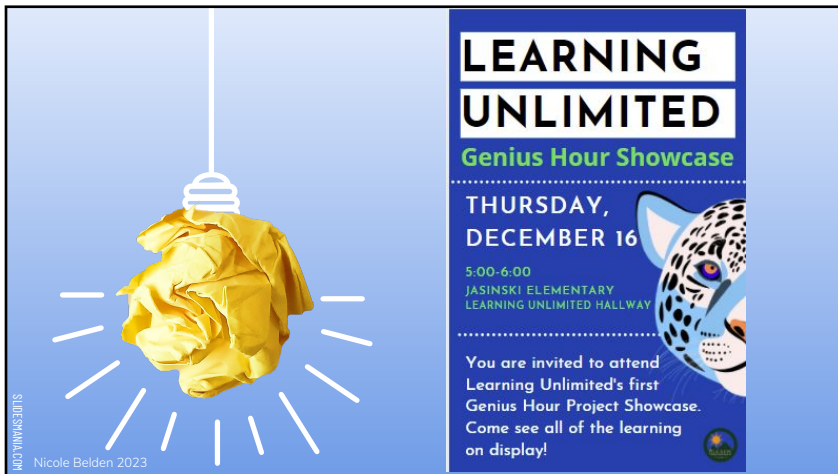
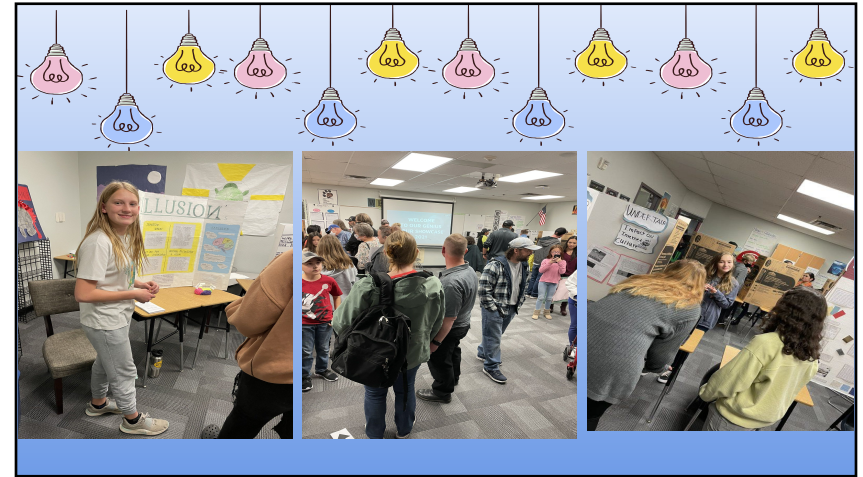


## Whole Group Reflection

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# Informational Brochure for Showcase Night

**Jasinski Genius Hour**

- 30 minutes
- 4 times a week
- student is the expert
- teacher is the guide
- quarter-long



**Jasinski Genius Hour**

The Importance of Student Choice and Voice in Gifted Education

Contact us  
[clayton.belden@studenchoice.org](mailto:clayton.belden@studenchoice.org)  
[studenchoice.org](http://studenchoice.org)

Heidi Baker  
 Gifted Specialist  
[studenchoice.org](mailto:studenchoice.org)

**What is Genius Hour?**

In the 1950's, the company 3M began the innovative practice of giving its employees company time to pursue their passions.

Google is another company known for the practice and has seen the creation of new initiatives, such as Gmail and Google Maps, that have helped the company thrive.

**Innovative Gifted Education**


At Jasinski, we applied the same model for both our gifted pull-out program in grades 2-5 and in our self-contained 6-8 gifted program Learning Unlimited.

**Genius Hour is . . .**


- open ended,
- process oriented,
- driven by student choice,
- a way to practice executive functioning skills such as:
- project management
- short-term planning
- long-term planning
- goal-setting
- organization
- decision




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# Genius Hour Showcase: Learning Unlimited




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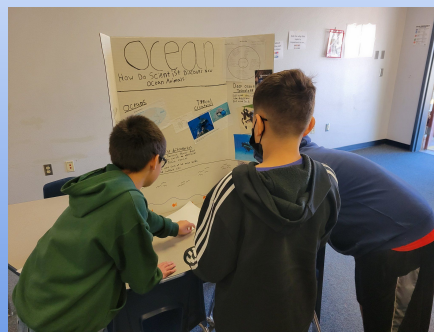
# Genius Hour Showcase: Pull-Out



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# Genius Hour Showcase: Pull-Out

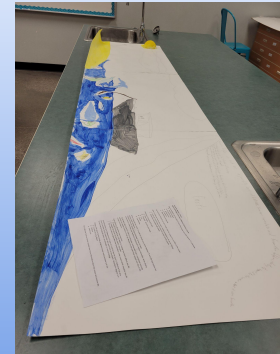
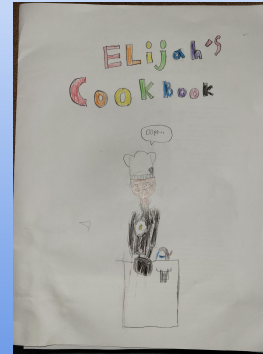


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## Products



## Products



Tips  
&  
Tricks



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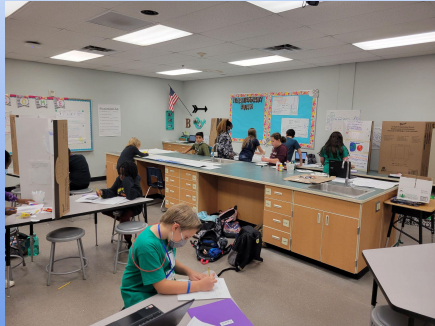


Keeping It Organized

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## Three-Ring Circus



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## 2-Pocket Folder with Prongs

- 💡 Calendar
- 💡 Work Log
- 💡 Passion Project Planning guide
- 💡 Pockets - graphic organizers, interview notes
- 💡 Drawers/cabinet to keep folders in the room
- 💡 List of possible products



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## Planning Guide

### My Passion Project Planning Guide

I am going to learn about:

I am going to make (product choice):

Why I want to learn about my topic:

How I will learn about my topic:

I will know I am successful when:

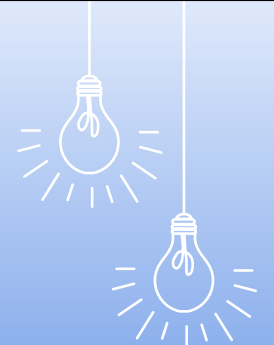


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### PASSION PROJECT WORK LOG

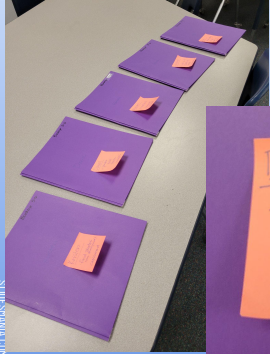
Date	Work Planned	Work Accomplished



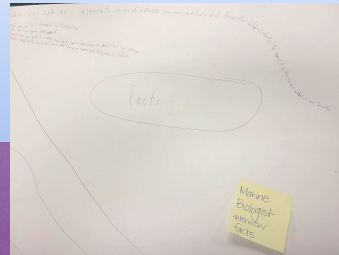
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# Daily Work Guidance



Daniel  
- poster  
- title  
- facts  
- images



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# Daily Work Guidance: To Do List



Paiden - cobra painting

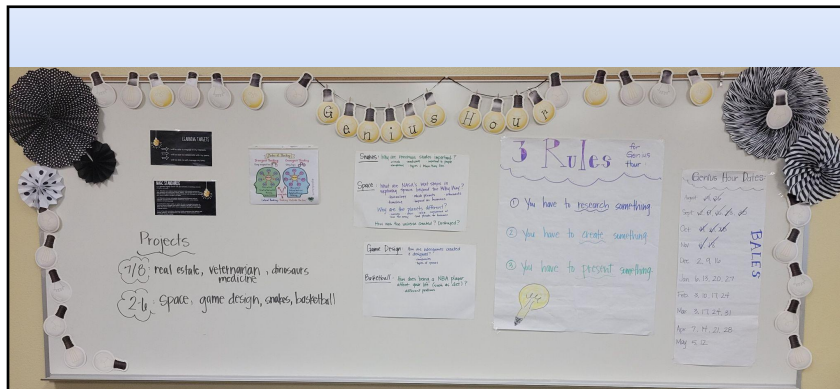
Samuel - facts, diagrams

Mia Tre > - title  
- facts

Dameon - in-fold, artwork

Steven  
Angel > feedback

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# Deadlines



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## Due Dates

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## Routine

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## Genius Hour Routine

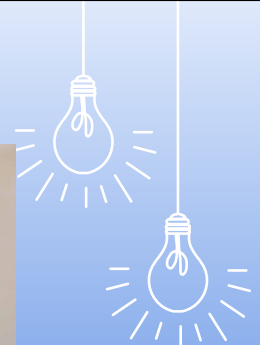
1. Students get folders and materials
2. Settle at their work areas
3. Attendance
4. Review Norms
5. Worktime - work log



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## Agenda

- ① Look back @ Circle Map:
  - What subtopic can you explore in-depth?
  - OR- Does your main topic need more information?
- ② Work Log: Work Planned  
-research
- ③ Work Log: Work Accomplished



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## Pull-Out Program or Within Classroom



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## Genius Hour Teacher's Role:

- Teacher Facilitator:
  - Set-up expert interviews
  - Modeling (graphic organizer; work log)
  - Help organize students - folder system, drawers
  - Set tone for work days - agenda, routine, review norms
  - Check-In on work log & progress



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## Genius Hour Within Classroom:

- Decide how many days a week
- Small groups with similar interests for research
- Everyone works on their own individual deliverable






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## Genius Hour as the Pull-Out Program:

- Multi-age groups at 4 campuses:
  - Grades: 2-6 & 7-8
  - Grades: 4-8 (with staggered start times)
  - Grades: 3-4 & 5-6 (with staggered start times)
  - Grades: 2-5
- Once a week for 30-60 minutes
- Dependent on my campuses schedules



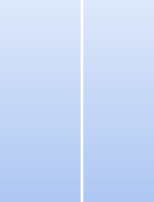
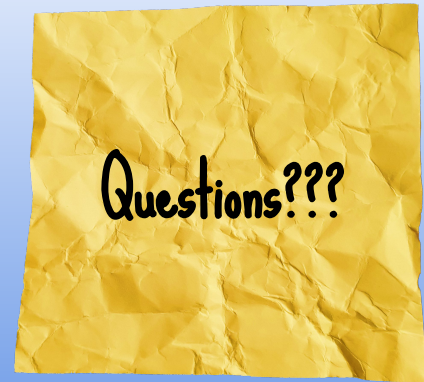

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Let  
It  
Go

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Questions???

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Survey in Chat

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Questions?



# Thank You



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@MomentBulb



@BESDGifted

## References

Casino-García, A. M., Llopis-Bueno, M. J., & Llinares-Insa, L. I. (2021). Emotional Intelligence Profiles and Self-Esteem/Self-Concept: An Analysis of Relationships in Gifted Students. *International Journal of Environmental Research and Public Health*, 18(3), 1006. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/ijerph18031006>

Jonson, B. (2019). 4 ways to develop creativity in students: Creativity is a valuable skill, and there are common strategies teachers can use to help students develop it. <https://www.edutopia.org/article/4-ways-develop-creativity-students/>

Kim, K. H. (2019). Demystifying Creativity: What Creativity Isn't and Is? *Roeper Review*, 41(2), 119–128.

Lee, L. E., Meyer, M. S., & Crutchfield, K. (2021). Gifted Classroom Environments and the Creative Process: A Systematic Review. *Journal for the Education of the Gifted*, 44(2), 107–148. <https://doi.org/10.1177/01623532211001450>

Ozkan, G., & Umdü Topsakal, U. (2021). Exploring the effectiveness of STEAM design processes on middle school students' creativity. *International Journal of Technology & Design Education*, 31(1), 95–116. <https://doi.org/10.1007/s10798-019-09547-z>

## References

Soslau, E. G., & Yost, D. S. (2007). Urban Service-Learning: An authentic teaching strategy to deliver standards-driven curriculum. *Journal of Experiential Education*, 30(1), 36–53. <https://doi.org/10.5193/JEE.30.1.36>

Westberg, K.L., & Leppien, J.H. Student independent investigations for authentic learning. *Gifted Child Today* 41(1), 13-18.

## Resources

Ken Ken <http://www.kenkenpuzzle.com/>

Which One Doesn't Belong? <https://wodb.ca/>