Daily Wonderings & Genius Minutes: Finding Ways to Fit Curiosity, Passion, and Wonder into Everyday Activities

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Link to this presentation: bit.ly/2CX0h0I
Link to handout: bit.ly/2rBd0Dy
Log onto Pollev.com for upcoming questions
Tweet out! @sheilamulbry
I have no special talents. I am only passionately curious.”

Einstein
CQ + PQ > IQ

Nobody works harder at learning than a curious kid"
-Thomas L. Friedman: The World is Flat
Quick survey!

Pollev.com/sheilamulbry597
How curious are you?

Extremely curious!

Somewhat curious

So-so

Not curious at all!

Total Results: 0
5+

- Helps protect your brain
Neurodegenerative diseases are more likely with inactivity in the brain.

Correlation does not imply causation, but the positive outcomes deserve notice.
5+

- Helps protect your brain
- Higher levels of happiness
Gallup poll of over 130,000 people from 130 different nations
5+

- Helps protect your brain
- Higher levels of happiness
- Strengths relationships
People who are curious have genuine interest in others and are better able to engage in conversations about a variety of topics.
5+

- Helps protect your brain
- Higher levels of happiness
- Strengths relationships
- Helps with anxiety
Engaging in pursuits about which you are curious takes your mind off anxieties.

"Replace fear of the unknown with curiosity."
5+

- Helps protect your brain
- Higher levels of happiness
- Strengths relationships
- Helps with anxiety
- Higher levels of learning and achievement
Curiosity is linked to higher levels of learning and remembering
"Curiosity may put the brain in a state that allows it to learn and retain any kind of information, like a vortex that sucks in what you are motivated to learn, and also everything around it,"

- Dr. Matthias Gruber, lead author of the study
Curiosity didn’t kill the cat. It improved his memory!
What does this mean?

How can we use this?

Education
Can an educator make a student curious?

Yes! Show me how!

No. A student is either curious or not.

Maybe. I'm not sure...
If students’ interests are stimulated, they are more open to learning.
Student Interest Survey

Date: __________ Age: __________

could be anything in the world when you grow up, what would you be? Why? (Realistic answers only, not a super hero or a time traveler.)

could travel anywhere in the world, where would you go?

take any special lessons outside of school? What? (Music, sports, dance, acting, singing, etc.)

Kinds of activities do you like to do with friends?

Kinds of activities do you like to do all by yourself?

Is your favorite sport?

Is your favorite TV show? Why?

Is your favorite movie of all time?

Is your favorite animal?

Is your favorite food?

Could you be like any one great person, whom would you choose?

Do you do at home when you have time to do anything you wish?

got for yourself regarding school in the coming year. Be specific. (Not "I want better grades.")

If you were given $1,000, what would you do with it?

The subjects you like to do most in school:

Math  Reading  Writing  P.E.  Science  Music  Social Studies  Spelling  Other:

did you last read a book? What was the title?

Is your favorite book of all time?

Magazines do you like to read?

Parts of the newspaper do you like to read?

10 fun ways to get to know your students

1. Class web: Have everyone sit in a circle with a ball of yarn. Pass the ball around and have the students say something unique about themselves. This shows how unique and connected everyone is!

2. Bookmark the part: Have students bring in a book with a part they enjoy marked. Take turns having the students read their passage aloud and telling the class why they like it.

3. Get to Know You bingo: Print sheets, like the ones on our Get to Know You Pinterest board, with Get to Know You style fill-in-the-blank boxes.

4. Post it: Give everyone five Post Its, and have them write one fact or draw a picture of something they like. Post into a collage.

5. Two truths and a lie: For older students, have them tell two truths and one lie about themselves, have other students guess which is the lie.

6. Classmate detective: Print out an interview sheet and have students ask a partner the questions.

7. Beach ball game: Write topics on the ball like favorites, about me sections, and general questions. Toss around and answer the question that lands on top!

8. Four corners: Ask Would You Rather questions and designate a corner of your room for each answer. Have the students think about their answers then choose a corner. Discuss their choice.

9. Comic strips: Have students create a comic strip about a funny moment in their lives.

10. Star of the week: Each week choose a different student to make a collage of things they like that will hang in the classroom. Start with yourself as a way to help your students get to know you!
James Johnson

**Interests:**
- Drums
- Dinosaurs

**Events:**
- Broke arm, 9/18

**Home life:**
- Has older brother
- Family goes camping often

**Other:**
- Great singer
- Loves performing

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<table>
<thead>
<tr>
<th>Names</th>
<th>Fact</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>Loves cars/ went to COTA races</td>
<td>10/12</td>
</tr>
</tbody>
</table>

Names as you remember them
Have you ever felt invisible? Bobby is a 9th grader who wakes up invisible one day. His parents are the only ones who know. Bobby meets and befriends a blind girl. Questions start popping up, like why isn't Bobby at school, and did his parents get rid of him?
**Anticipation Guide for The Westing Game**

True or False? What do you think Ellen Raskin's mystery is about? After completing each question, be prepared to defend your answers in a group.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The tenants of Sunset Towers were specifically chosen to live there.</td>
<td></td>
</tr>
<tr>
<td>2. All the tenants love eating at Shin Hoo's Chinese Restaurant.</td>
<td></td>
</tr>
<tr>
<td>3. One of the tenants murdered Sam Westing.</td>
<td></td>
</tr>
<tr>
<td>4. Turtle is Grace Wexler's pet.</td>
<td></td>
</tr>
<tr>
<td>5. It is okay to commit a crime if you are trying to protect someone.</td>
<td></td>
</tr>
<tr>
<td>6. Stealing things is okay as long as it helps you win the game.</td>
<td></td>
</tr>
<tr>
<td>7. We should depend on outward appearances when choosing our friends.</td>
<td></td>
</tr>
<tr>
<td>8. Boys are better at solving mysteries than girls.</td>
<td></td>
</tr>
<tr>
<td>9. A bomber used bombs to help narrow the competition.</td>
<td></td>
</tr>
<tr>
<td>10. It is wise to keep secrets from others when personal gain is involved.</td>
<td></td>
</tr>
<tr>
<td>11. All the tenants personally knew Sam Westing.</td>
<td></td>
</tr>
<tr>
<td>12. It is important to accept other people, even when they are different from yourself.</td>
<td></td>
</tr>
<tr>
<td>13. All criminals are bad people.</td>
<td></td>
</tr>
</tbody>
</table>
Prior Knowledge

Activity: Anticipation Guide
Purpose: To activate prior knowledge, set purpose for reading and help students make connections.

1. Select a text for students to read.
2. Create 5 - 8 general statements for students to reply to with “agree” or “disagree”. These statements can be either confirmed or may be disconfirmed by reading the text.
3. Have students indicate agreement or disagreement by placing a check in the appropriate column.
4. Students read text to confirm or disconfirm their choices.
5. After reading, have students revisit their predictions and modify if necessary.

NF Books for Pre-Reading Anticipation
Notebooks and Journals - An essential tool for all great thinkers
Excerpt from Mark Twain’s notebook on ideas for character names
Leonardo da Vinci’s notebook

- Calculate the measurement of Milan and its suburbs
- Find a book that treats of Milan its churches, which is to be had at the stationer’s on the way to Cordusio.
- Discover the measurement of the Corte Vecchio [courtyard of the duke’s palace].
- Get the Master of Arithmetic to show you how to square a triangle.
- Ask Bendetto Portinari [a Florentine merchant] by what means they go on ice at Flanders?
- Draw Milan.
- Ask Maestro Antonio how mortars are positioned on bastions by day or night.
- Examine the crossbow of Maestro Gianetto.
- Find a Master of Hydraulics and get him to tell you how to repair a lock, canal and mill, in the Lombard manner.
- Ask about the measurement of the sun, promised me by Maestro Giovanni Francese
Cotton Picker
New Standard Phonograph
Hand turning phonograph
New Slow speed cheap Dynamo
New Expansion Pyromagnetic Dynamo
Deaf Apparatus
Electrical Piano
Long distance standard Telephone Transmitter which employs devices of recording phonograph
Telephone Coil of Fe [iron] by tt in Parafine or other insulator
Platina Point Trans using new phono Recorder devices
Ideas for notebooks

- Interesting facts
- Topics of interest
- Tickling questions or wonders
- Random thoughts
- Wonder Walls
- Daily Wonders
- Random Trivial Tidbits
→ Wonder Walls

→ Can be answered by Wonder Woman or Superkids
Online Tools for Collaborative Wonderings or Findings

Padlet - You can create questions to which students respond or students can post trivia they learn and others can comment
Online Tools for Collaborative Wonderings or Findings

Seesaw - Students insert a curiosity to explore, picture or question
Which are you most curious about?
Follow the QR Code to learn more about this photo...
Sources for Daily Wonders:

- Ian Byrd’s Curiosities and Puzzlements
- National Geographic
- All that is Interesting Photographs
- This is Colossal
- Bedtime Math
Why Does Pipe Down Mean “Shut Up!”?

The original pipe in pipe down was a boatswain’s whistle, and pipe down was a signal to sailors that they were dismissed for the day and could go belowdecks. By the late nineteenth century, the tattoo signal, usually sounded immediately before “taps,” explicitly meant to quiet down. Obviously the deck was quieter once the sailors went belowdecks. Eventually the boatswain’s whistle was replaced by a bugle, but the meaning of the signal was the same.

Imponderable Books by David Feldman
Why are dogs’ noses wet?

While the noses of many dogs are wet, plenty of dogs have dry ones. What keeps a dog’s snout moist? No one knows for sure. One theory says that the wetness comes from mucus produced inside Fido’s nose. Another hypothesis suggests that because dogs lick their noses all the time, saliva keeps their noses moist. Despite popular belief, a warm nose does not mean a dog is sick.

Why do dogs turn around before lying down?

Around, and around, and around again! Dogs will often circle the bed or carpet two or three times before curling up and going to sleep. Are they checking for bed bugs or snakes? Not necessarily. Many times dogs are just flattening out their beds to get comfortable. Actually, this behavior is a genetic trait left over from when the dog’s ancestors used to dig their own shelters. After digging, the dogs would feel comfortable in their “dens” and plop down for some much needed shut-eye.

Why do wolves and dogs often look alike?

Scientists say that dogs evolved from wolves about 15,000 years
Weird State History Facts / Interesting Info

- Woodpecker tongues
- Fruit Salad Trees
- Largest tire manufacturer
- Killer armadillos
- Mirror spider

Wonder Jar facts to explore, prove or disprove Destination Jar – where do you want to go?
GENIUS AT WORK
Personal Research On Everything
Personal Research On Everything

Regarding the Fountain

Regarding the Bathrooms

Spain

Spain is located in western Europe. It is a peninsula and has lots of mountains and coast. The capital of Spain is Madrid. Spain is one of the most visited countries in Europe (Europa) meaning there are lots of tourists. "Espana" means Spain in Spanish.

The King of Spain nominates a president for presidency. The current president of Spain is Pedro Sánchez, who is the leader of the Socialist Party (PSOE). The national holiday of Spain is celebrated on October 12th. People all over Spain celebrate this day with dancing, singing, fireworks, and bullfighting. Other activities that people in Spain do are wakling, wild cats, deer, wild boar.
Creating Driving Questions - What are your passions?
Gimme that ball or I'll punch your face in.

Smart move, sissy boy.

In my opinion, we don't devote nearly enough scientific research to finding a cure for jerks.
What were types of Medieval Weapons?

How are Service Animals trained?

Why do monarch butterflies migrate?

What alternative energy sources are being created?

How has Light Technology evolved?

How old do I have to be to Scuba Dive?

How was WWII won?

How are chefs trained in French Cuisine?

Is dark chocolate good for my health?

Can I freshwater fish in Texas?
TOUGH DECISIONS AHEAD
Generating ideas...jot down

1. How you spent the last “free time” hour you had
2. The title of a NF book you read or are reading
3. The last thing you “Googled”
4. A skill someone you admire has
5. A place you have dreamt of visiting
6. An item on your “wish list”
7. An item on your “bucket list”
8. An interesting news item you recently saw

Idea adapted from Harvey Daniels The Curious Classroom, page 6
Organizing Research...

- Go through your Wonder NB to find a question or topic that piques your interest
- Find the bigger topic that encompasses this question
- Write things you know about your topic
- Participate in a “round robin” question session
- Categorize your facts and questions
- Organize your categories to begin research
Name:

Choosing a topic is one of the most exciting parts of your Passion Project! Be careful because you are going to be spending a lot of time getting to know your topic. List your top 5 topics across the top. Then, think carefully about each of the questions as they relate to each topic. If the topic is too large, you will have to spend more time working on it at home. You will have to find at least three resources (not just the Internet). **Rate your response on a scale of 0-5.** Be honest and don’t rate everything a 5. Once you have rated your topics on all of the questions, add up the columns.

<table>
<thead>
<tr>
<th>Topic</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>How much do I want to learn about this topic?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many questions do I have about this topic?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can I find a lot of information on this topic? Look in Destiny Quest!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can I finish in time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Am I really passionate about this topic? Will this make a difference in my life?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List some of the questions you have about your topics:
Type your topic next to your name and “my topic” in the question section.
Hand your sheet to your right.
Find your name on the sheet you received and look at the topic.
Next to your name write a question you have about that person’s topic.

[Link to chart]

<table>
<thead>
<tr>
<th>Name</th>
<th>Topic</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lloyd</td>
<td>Chocolate</td>
<td>My topic</td>
</tr>
<tr>
<td>Elijah</td>
<td></td>
<td>What is the difference between white and milk chocolate?</td>
</tr>
<tr>
<td>Ellie</td>
<td></td>
<td>How do they put fillings inside chocolate?</td>
</tr>
<tr>
<td>Cooper</td>
<td></td>
<td>When was chocolate discovered?</td>
</tr>
<tr>
<td>Josh</td>
<td></td>
<td>Why is dark chocolate considered “good” for you?</td>
</tr>
</tbody>
</table>
F.I.L.E. (Folder for Independent Learning Experiences) Research

Another option for research management
Curiosity Sites

Symbaloo - A way to limit websites students can explore
Wondering with Technology

See Handout for more web links
There’s just so much science, nature, music, art, technology, storytelling and assorted good stuff out there that my kids (and maybe your kids) haven’t seen. It’s most likely not stuff that was made for them…

But we don’t underestimate kids around here.

Search & enjoy 3,000+ smart & super-cool, “not-made-for-kids, but perfect for them” videos in the classroom or together at home, curated by Rion Nakaya with her 6 & 9 year olds.
Welcome to Wonderopolis®, a place where natural curiosity and imagination lead to exploration and discovery in learners of all ages. Each day, we pose an intriguing question—the Wonder of the Day®—and explore it in a variety of ways. Wonderopolis was created by the National Center for Families Learning (NCFL) in 2010, and it has become one of the most popular education sites today.
Live Nature Cams

Panda Live Cam

explore.org

Raptor Resource Project
Bedtime Math is the brainchild of Laura Bilodeau Overdeck. While not a professional teacher, she does know something about numbers. As a kid she sat and memorized perfect squares for fun, back before it was cool. As a mom, she (along with her husband John) started giving math problems to their two older kids; when their 2-year-old started hollering for his own math problem, they knew they were onto something, and Bedtime Math was born.

Become a Bedtime Math Superfan and see your question answered!
The introduction of Wolfram|Alpha defined a fundamentally new paradigm for getting knowledge and answers—not by searching the web, but by doing dynamic computations based on a vast collection of built-in data, algorithms and methods. 

*Bringing broad, deep, expert-level knowledge to everyone… anytime, anywhere.*
a Google a day

There's no right way to solve it, but there's only one right answer.

START PLAYING

We ask a question

‘An 11-foot bird lives less than two miles from 30.891383,-102.885032. What’s his name?’

You find the answer

Put your search skills and Google's tools to use. For instance, you can enter 30.891383,-102.885032 right inside the search bar, and learn that it's directly in the center of Ft. Stockton, TX. A quick Search for [Giant bird ft stockton TX] (or perhaps you're the adventurous type who'll "walk" there in Street View) and you'll have your bird: Paisano Peta.
When you instill curiosity in children, you are encouraging their desire to learn. That is one of the greatest gifts that you as an educator can give your students.

- Marilyn P Arnone
  Fostering Curiosity in Your Students
Resources and links to research articles

https://greatergood.berkeley.edu/article/item/six_surprising_benefits_of_curiosity
https://www.psychologytoday.com/blog/thriving101/201410/the-secret-benefits-curious-mind
https://experiencelife.com/article/the-power-of-curiosity/
http://www.educationoasis.com/visitor-resources/articles/fostering-curiousity/
https://www.edutopia.org/practice/i-wonder-questions-harnessing-power-inquiry
http://www.adlit.org/strategies/19712/
Books and other reference material


Books for Weekly Wonderings

The Way Things Work by David Macaulay
David Feldman books: Imponderables Book Series by David Feldman Who Put the Butter in Butterfly... When Do Fish Sleep
Time for Kids, Big Book of Why
Heavens to Betsy and Other Curious Sayings by Charles Funk
Ever Wonder Why? Here are the Answers by Douglas Smith
Know It All by Ed Zotti
Horrible Histories by Terry Deary
Do Fish Drink Water? By Bill McLain
The Greatest Stories Never Told by Rick Beyer
Accidents May Happen by Charlotte Foltz Jones
The Fortunate Fortunes by Nathan Aasent
I Can’t Believe It’s History! by Katy Keck Arnsteen and Donna Guthrie
Bugged: How Insects Changed History by Sarah Albee
Other presentations

Link to 2013 Powerpoint presentation on using ABC Books: goo.gl/yFtNZr
Link to 2013 Creative Potpourri Presentation handout: goo.gl/7FcNNM
sheila.mulbry@lockhart.txed.net
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Session Code

DC–3121

Discovery