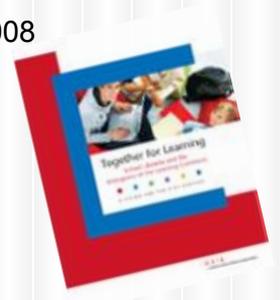

Good Question!

Let's Find Out!

bit.ly/library2015

Presented by: Kristina Burbidge & Debbie Vert

Good questions are the driving force of critical and creative thinking and therefore one of the best indicators of significant learning. Good questions are those that force students to challenge their taken-for-granted assumptions and see their own underlying biases. Oftentimes the answer to a good question is irrelevant – the question is an insight in itself. The only answer to the best questions is another good question. And so the best questions send students on rich and meaningful lifelong quests, question after question after question. - Wesch, 2008



Thinking Differently About How We Educate

Modern students:

- text message on their cellphones
- browse/download movies & music
- know how a TV show will end before the season begins
- research, write and author online content in their spare time
- listen to music, do their homework & text their friends simultaneously

WHAT Do You WANT
KIDS To Do With
TECHNOLOGY?

WRONG
ANSWERS

- MAKE PREZIS
- START BLOGS
- CREATE WORDLES
- PUBLISH ANIMOTOS
- DESIGN FLIPCHARTS
- PRODUCE VIDEOS
- POST TO EDMODO
- USE WHITEBOARD
- DEVELOP APPS

RIGHT
ANSWERS

- RAISE AWARENESS
- START CONVERSATIONS
- FIND ANSWERS
(TO THEIR QUESTIONS)
- JOIN PARTNERS
- CHANGE MINDS
- MAKE A DIFFERENCE
- TAKE ACTION
- DRIVE CHANGE

TECHNOLOGY IS A TOOL, NOT A
LEARNING OUTCOME.

Inquiry is the key!



“Knowledge building” vs. “Knowledge telling”

- shift teacher’s thinking
- lead students to learn how to learn
- teach students to ask questions, analyze, interpret and evaluate
- acknowledges and values global cultures and practices

“Being able to think critically and creatively will prepare learners to approach opportunities with intelligence. Learning requires flexible and inquiring minds that not only take in information, but also question it. Students need multiple opportunities to practice and test their abilities through inquiry.” - T4L

What is a Good Question?

Good questions:

Good Questions	
Require open ended not closed answers (i.e. many possible correct answers, not yes/no)	Require proof from the text or your personal experiences/connections in the answer...
Make you evaluate the information and create an opinion in your answer	May contain the words: would, might or will....

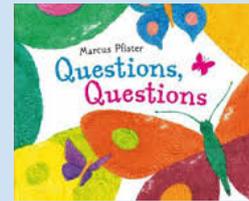
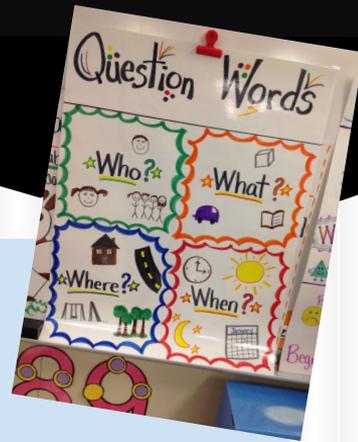
Ultimate goal is for students to use good questions to inquire and evaluate information, or the opinions of others.

Kindergarten

- Moving beyond “What is this made of?” and wild predictions
- Questioning chart modified and visible on walls

	Is	Did	Can
Who			
Where			
When			
Why			
How			

- Sticky notes are used to record student questions during play
 - Assess for learning



Primary

- Discussing Author's Purpose and the power of changing another's thinking

The image shows a whiteboard with handwritten notes in red and black ink. On the left, three red bullet points are listed: 'Think It' with a thought bubble above it, 'Share It' with a mouth icon above it, and 'Prove It' with a book icon above it. Below these, two red sub-points are written: 'refer to text' with an arrow pointing to the right, and 'make a connection' with a wavy line pointing to the right. On the right side of the whiteboard, three questions are written in black ink: 'What is your idea/opinion?' with a lightbulb icon above it, 'Tell others your idea/opinion.', and 'What makes you think that?'. Below these questions, two examples of responses are written in blue ink: '- in the book it says/shows...' and '- in my experience...'. A black arrow on the right side of the whiteboard points from the top right towards the bottom right.

- Think It
- Share It
- Prove It

- refer to text
- make a connection

What is your idea/opinion?

Tell others your idea/opinion.

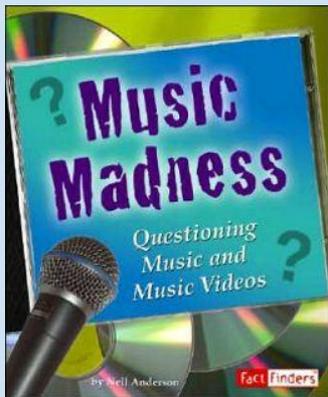
What makes you think that?

- in the book it says/shows...

- in my experience...

Junior/Intermediate

- Model
- Share
- Guide
- Assess



Capstone Series

	Is	Did	Can	Would	Will	Might
Who						●
What						●
Where						
When						
Why						●
How						

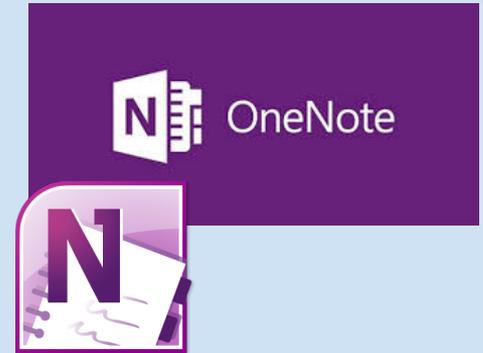


Koechlin & Zwaan

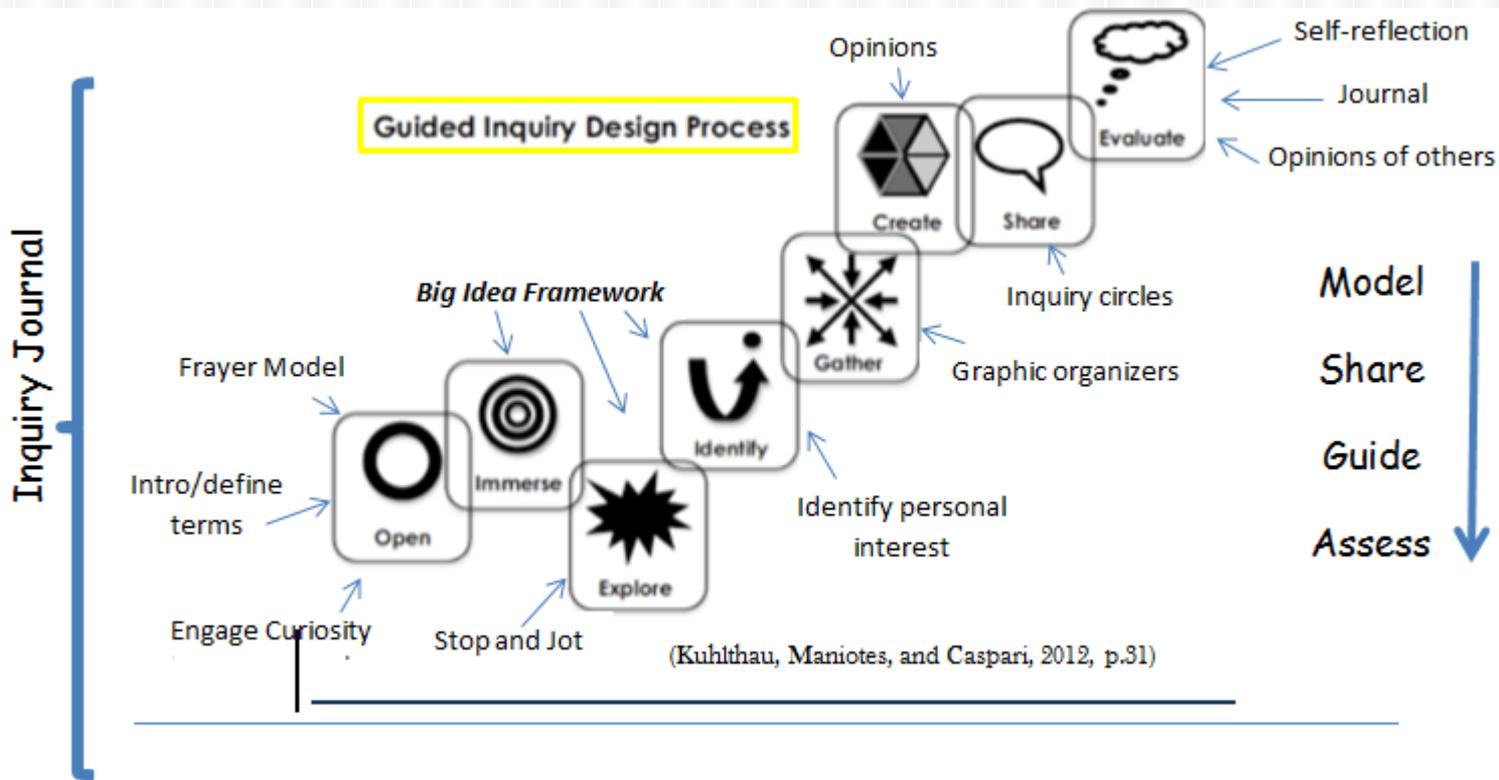
Guided Inquiry



- Grade like Junior teachers met to discuss Inquiry
 - What does it look like?
 - Curriculum vs student needs?
 - Resources (needs assessment)
 - Teacher models authentic inquiry initially with educational databases
- One Note collaborative binder
 - one for each grade level gr. 4-6
 - modeling for student usage for online inquiry
 - Inquiry Journal



Inquiry Learning





Inquiry Journals

Inquiry Journals

- Learning journal to express thoughts, feelings and actions across the inquiry process and to reflect on learning and discussions at each phase in the process (Guided Inquiry Design 2012)
- Entries should include personal connections, various levels of thinking, drawing and diagrams

Prompts can include:

- Reflections on the process or discussions
- Answers to a question at a key moment
- Assessments at beginning, middle and end of process
- Responses to inquiry community questions
- Can include diagrams, questions, thoughts, graphic organizers, comments from others , charts, tools to assist inquiry styles and needs

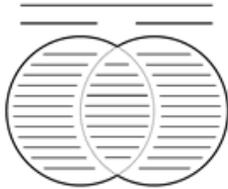
[Inquiry Journal Brochure](#)



Student Needs

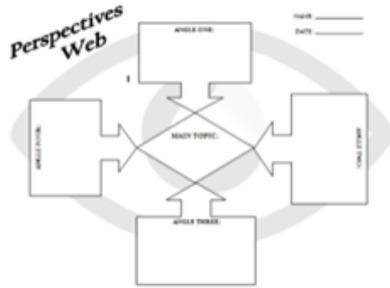
Graphic Organizers for Thinking and Learning

Compare &
Contrast

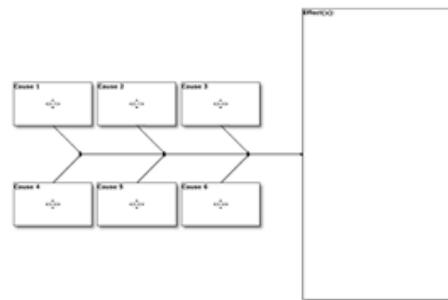
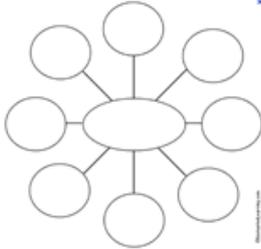
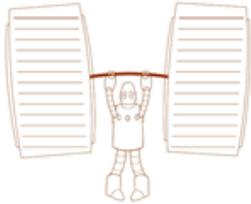
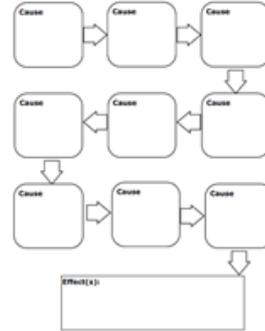


Venn Diagram

Perspective



Cause and Effect or
Consequences



Success Criteria

We are learning to use the inquiry process to create opinions for big ideas related to heritage and identity/people and environments. (Social Studies)

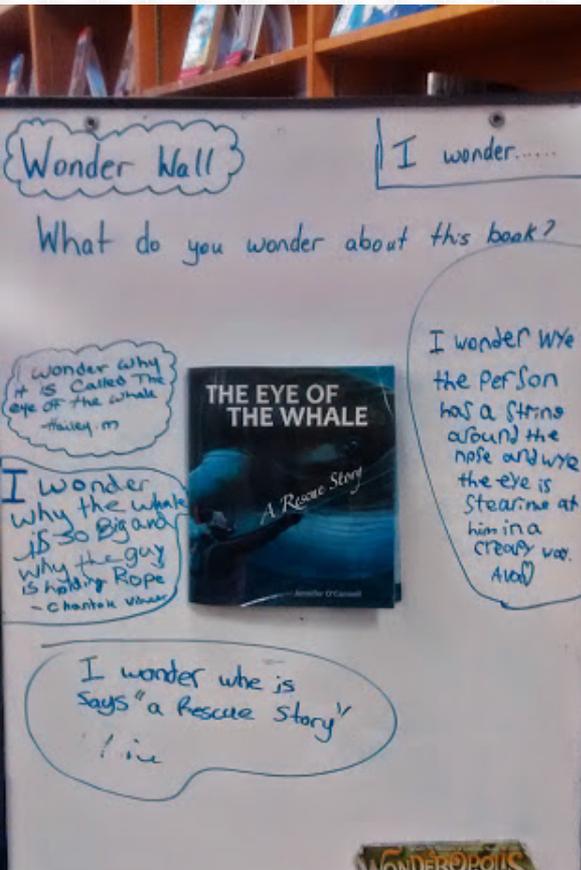
We are learning to:

- Record our thoughts and ideas in our inquiry journals throughout the process
- Focus our inquiry using the big ideas and our personal interests
- Use graphic organizers to organize our thinking
- Collaborate with peers and teacher throughout our inquiry
- Assess the inquiry of others and give constructive feedback
- Create an opinion and share with others based on inquiry
- Reflect upon our inquiry strategies and tools for effectiveness

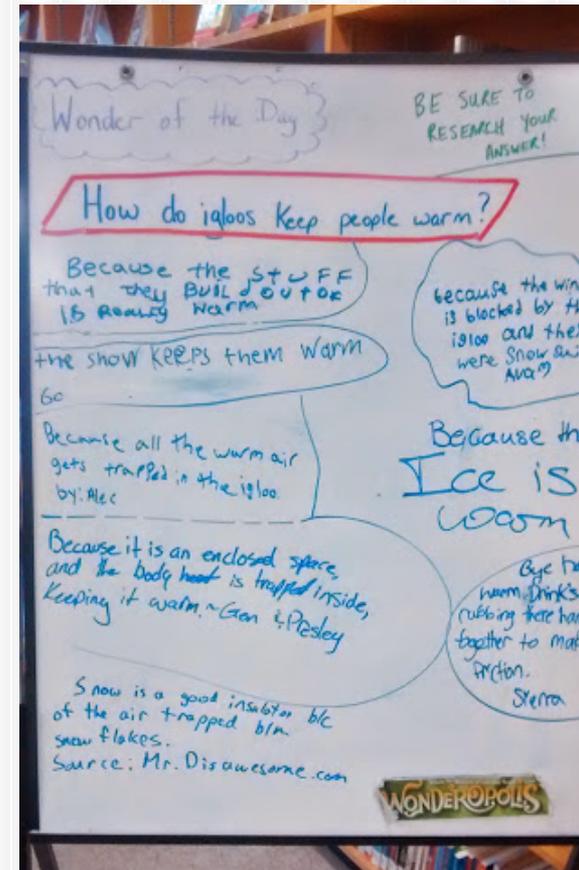


**Success
Criteria**

Wonder @ the Library



“Some may believe that children go to school to find answers, but really it’s the questions that ignite the learning. Our questions usually begin as a moment of wonder” - The Teaching Librarian Magazine

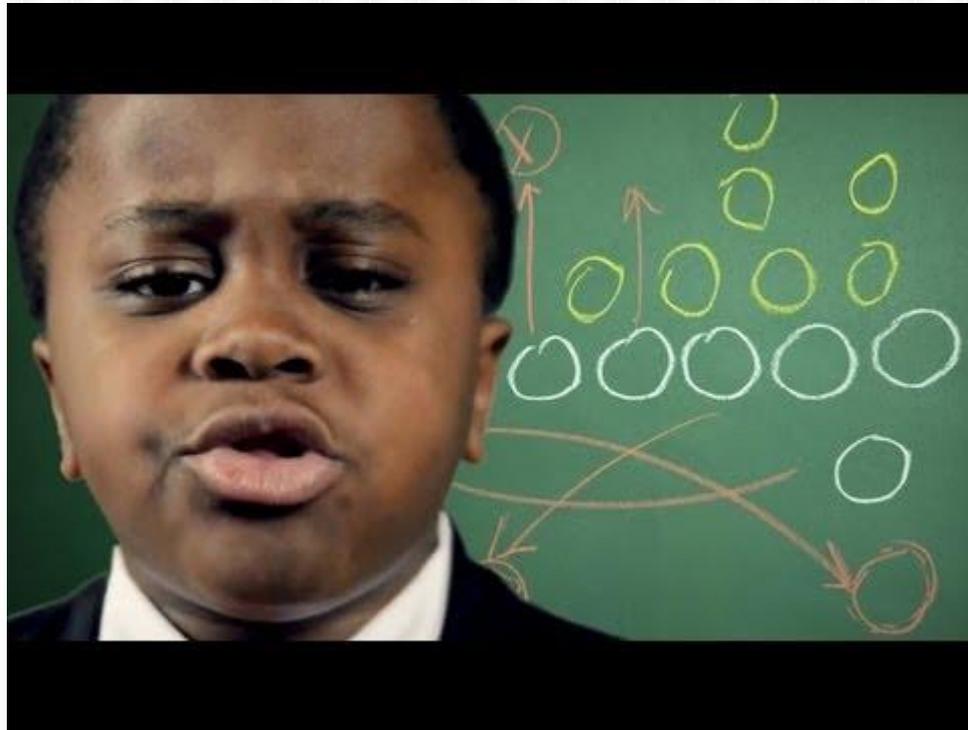


Genius Hour

The world needs you.
Stop being boring!

Boring is
easy.

It's time to
DO SOMETHIN'



We were made to be awesome.

What is Genius Hour?

- A time to learn about what interests them.
- A time to learn about what saddens them.
- A time to find a passion.
- A time to take control of learning.
- A time to create a project that will impact the classroom, community, or world.



Coding

“Everybody in this country should learn how to program a computer... because it teaches you how to think.”

- Steve Jobs



CALLING ALL TEACHERS WORLDWIDE

Why Coding?



It is essential that students are exposed to the field of computer science in our K-12 system—as it is foundational in transforming the way a student thinks about the world. It not only teaches them about technology, it also teaches them how to think differently about any problem.

“Learning to write programs stretches your mind, and helps you think better, creates a way of thinking about things that I think is helpful in all domains.” - Bill Gates Chairman, Microsoft

Try it today!

<http://learn.code.org/>

Code.org - Google Chrome

learn.code.org

Apps Docs Starfall MBNA Gmail Calendar lotus Manulife PC Queens email Bookmarks Netflix Moodle Songza Weather music

Frozen
Let's use code to join Anna and Elsa as they explore the magic and beauty of ice.

Hour of Code
Try the basics of computer science with many fun characters!

Play Lab
Create a story or make a game with Play Lab!

Flappy Code
Wanna write your own game in less than 10 minutes? Try our Flappy Code tutorial!

20 hour courses for Beginners (all ages)

Course 1
Course 1 is designed for early readers.
Ages 4+ (pre-readers)

Course 2
Course 2 is designed for students who can read.
Ages 6+ (reading required)

Course 3
Course 3 is a follow-up to Course 2.
Ages 8+ (after Course 2)

Course 4 beta
Students taking Course 4 should have already taken Courses 2 and 3.
Ages 10+ (after Course 3)

CO Introducing Code Studio
DE for grades K-5

"If learning is enjoyable and challenging, learners will do it enthusiastically. Think of a video game that players are keen to concentrate on for hours. They do it because it's "hard fun." Turning hard work into hard fun ***requires helping students relate their work to their own lives and the culture in which they live.*** This type of learning, inherent in the Learning Commons, is sticky — it stays with the learner. And it creates an environment where the individual will grow and flourish." - T4L

What About Me?



What about your school?

What are your observations?

How is your school addressing inquiry learning and student needs?

How do we as TLs assist teachers to make the transition from traditional to inquiry learning?

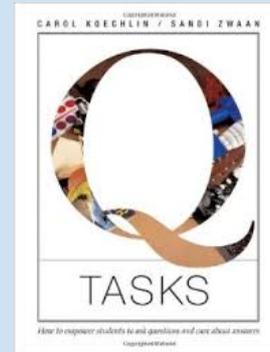
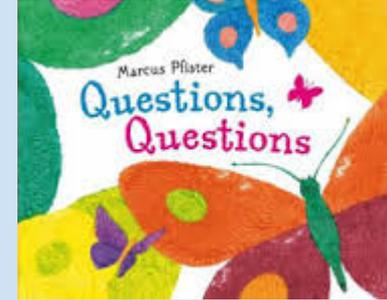
How do we as TLs assist students to make the transition from traditional to inquiry learning?

Does your school have adequate tools for inquiry (i.e. technology)?

Examples and Resources

Questions Resources

- Kindergarten
 - Questions, Questions by Marcus Pfister
- Primary
 - Reading for Meaning Bins (Questioner)
 - Questioning Charts
 - Visible Reminders of Good Questions
- Junior & Intermediate
 - Q Matrix Questioner page
 - Reading for Meaning Bins (Questioner)
 - Questioning Chart (Creative Services)
 - Q Tasks by C. Koechlin & Sandi Zwaan



Primary Sample

People and Environments Gr. 3

Inquiry: Use the social studies inquiry process to investigate some of the environmental effects of different types of land and/or resource use in two or more Ontario municipal regions, as well as some of the measures taken to reduce the negative impact of that use (FOCUS ON: Cause and Consequence, Perspective)

In groups, students rotate through Inquiry centres collecting data on the the type of community (rural vs urban), transportation, resources and natural environment, occupations, tourist attraction/travel and anything they found interesting,

Gr. 3 Inquiry Centres

Inquiry Centres reflecting various communities:

- **Google Earth** (laptops) with TL (selected cities/towns to focus on that may be relevant to students)
- **Images:**Photos, brochures, pamphlets & maps (from various selected cities/towns)
- **Library Books** (Canada at Work series ((Kids Can Press)), Learn about Rural Life series ((Crabtree))
- **Our Country, Canada** text (Cairo & Soncin)
- **Articles** (one page info from a teacher resource package on communities)

Junior Inquiry

Social Studies; Heritage and Identity:

Inquiry: use the social studies inquiry process to investigate different perspectives on the historical and/or contemporary experience of two or more distinct communities in Canada (FOCUS ON: Perspective)

- Teachers model authentic inquiry of the contributions to Canada's identity using data projector, DDSB Learning Commons Quick Links based on the theme of Maple Syrup and peoples' contributions.
- Teachers will guide discussions to model different perspectives of First Nations and European settlers. Students will respond /reflect in inquiry journals

Junior Inquiry

- Teachers model inquiry of Residential Schools and various perspectives of First nations, European settlers and government (present and past). Teachers guide discussions on Canada as an inclusive society in present day.
- Students to inquire on experience of an immigrant group using DDSB Learning Commons (initially), text and atlases. Students will use at least one graphic organizers (as modeled by teacher), and an inquiry journal to track their progress. Internet inquiry will be collected in ONE NOTE binder (as modeled for students). Students will self-assess their inquiry journals and identify areas of strengths or effective tools and growth areas or next steps for inquiry in the future.

Resources

[Grade 3 Lego Community Rubric](#)

[Inquiry Journal Brochure](#)

[Grade 3 Community Inquiry](#)

[Heritage and Identity Grade 6 One Note file](#)

[Genius Hour Parent letter](#)

[Genius Hour Proposal](#)

[Genius Hour Success Criteria Hour Glass for students](#)

[Genius Hour Goals](#)

[Genius Hour Rubric](#)