

## Elementary Inquiry: The Sound of Learning



The Sound of Music, 1965

**Kristin Fontichiaro, University of Michigan School of Information**  
font@umich.edu - @activelearning – Slides: <http://bit.ly/fontblog>

## Today, we'll

- Talk about past research projects
- Discuss practical strategies for moving to inquiry



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## Where We Come From



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### Animal Research

My animal is the ostrich.

It is a bird.

Its size is 7-9 feet.

It lives in Africa and zoos.

It eats plants, nuts, seeds, insects, lizards, other creatures.

Fascinating facts:

Its eye is really big.


It is taller than a grown-up.

Their plumage blends well with the sandy soil.



<http://animals.nationalgeographic.com/animals/birds/ostrich/>

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# MY OSTRICH, REPORT!!

By Kristin



## The Ostrich

- Bird
- Feathers
- Long legs



Hello Mr. Ostrich!

## Lives

- Africa
- Sandy



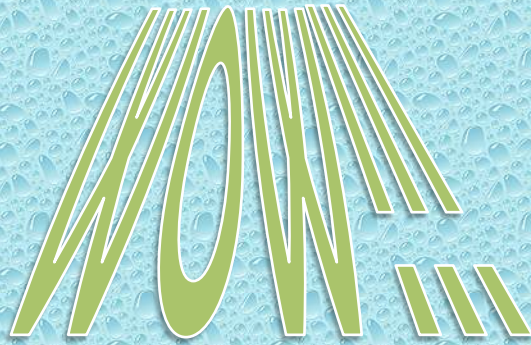
## Eats

- Nuts
- Seeds
- Insects (ew!)



## Fascinating facts

- Plumage
- Taller than a man!!!!
- Eggs




## The End





Image: canada.com



- Inquiry, thoughtfulness, problem-solving
- Using and evaluating information
- Social, collaborative teaching and learning
- Authentic work tasks, products, and audiences
- Librarian as instructional partner throughout process

- “Dump and go”: finding answers to specific close-ended, teacher-generated questions
- Finding information
- Isolated, individual learning
- Contrived tasks without resonance to student
- Librarian as an accessory to learning (“a clerk could do it”)

## Inquiry's Favorite Things

Authentic student questions vs. teacher-directed ones

Open-ended conclusions vs. uniform results

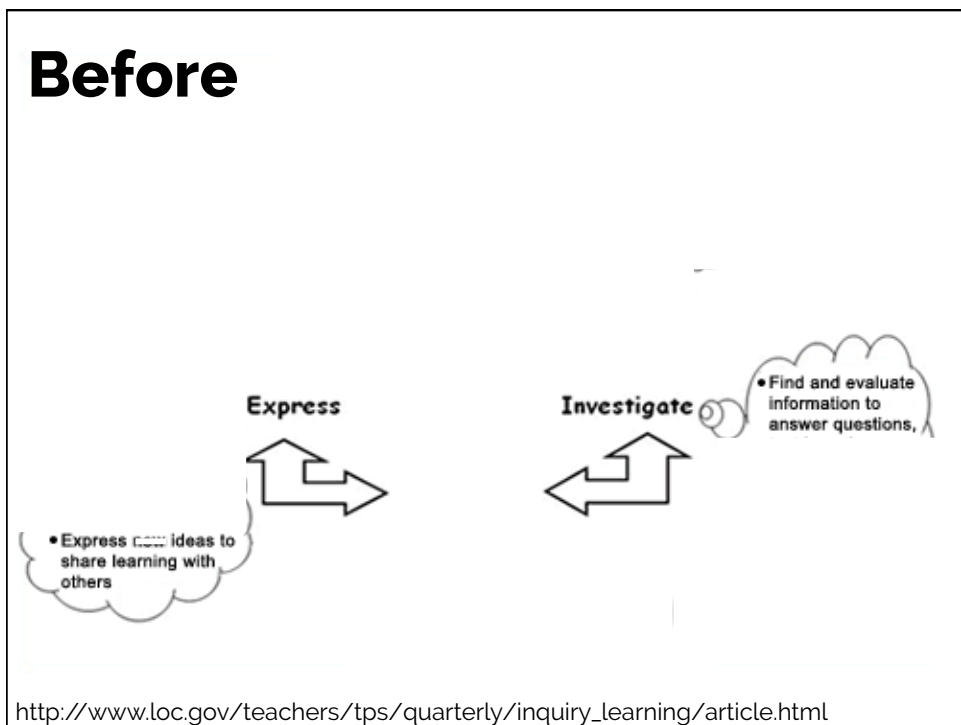
Critical thinking and comprehension vs. regurgitation

Synthesis vs. cut-and-paste



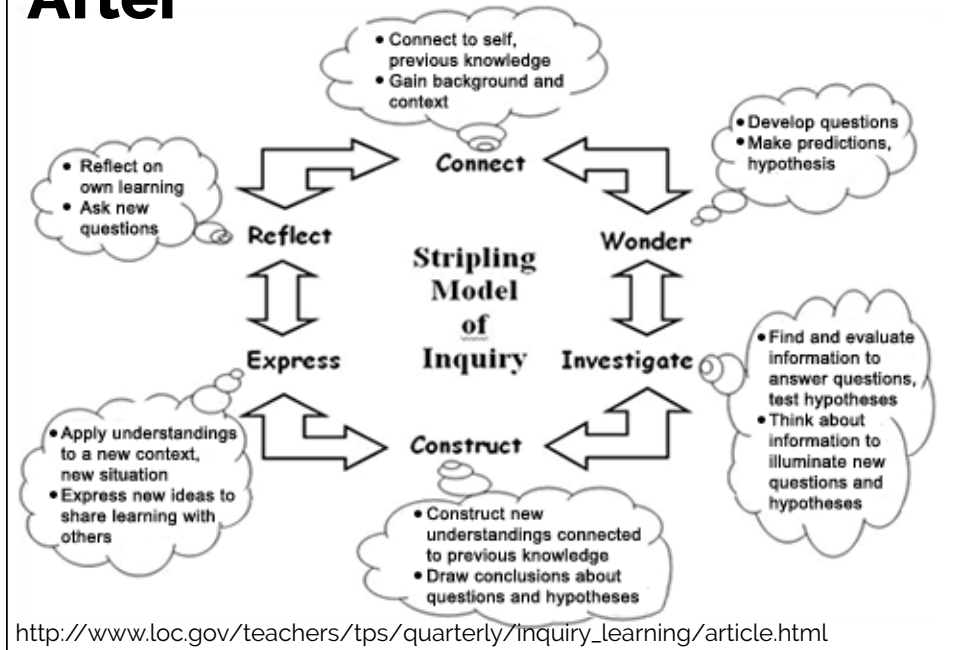


## Before

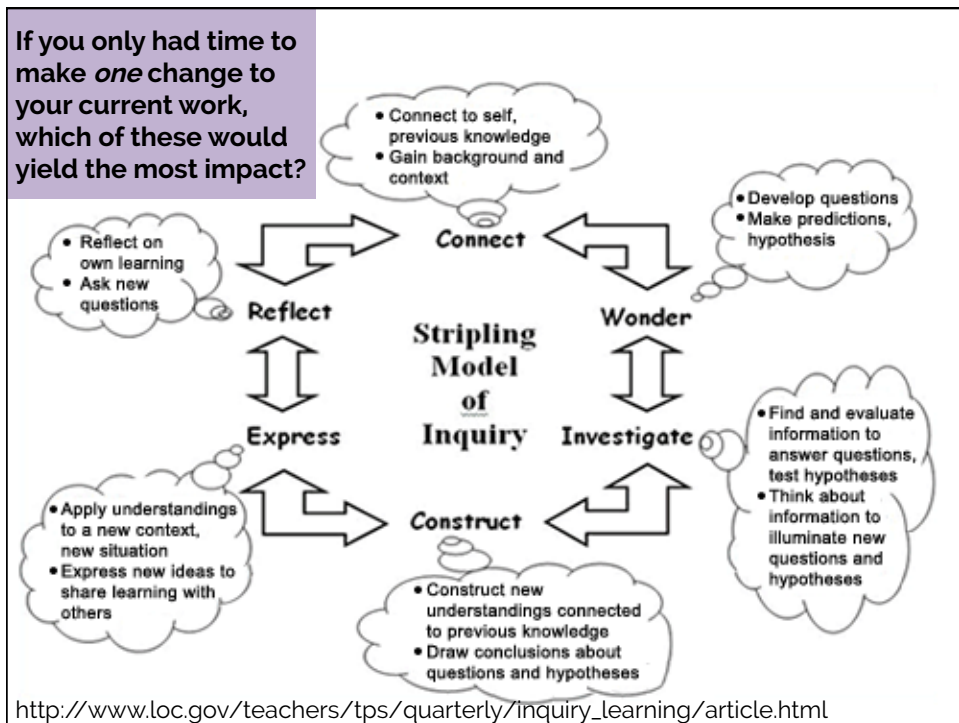




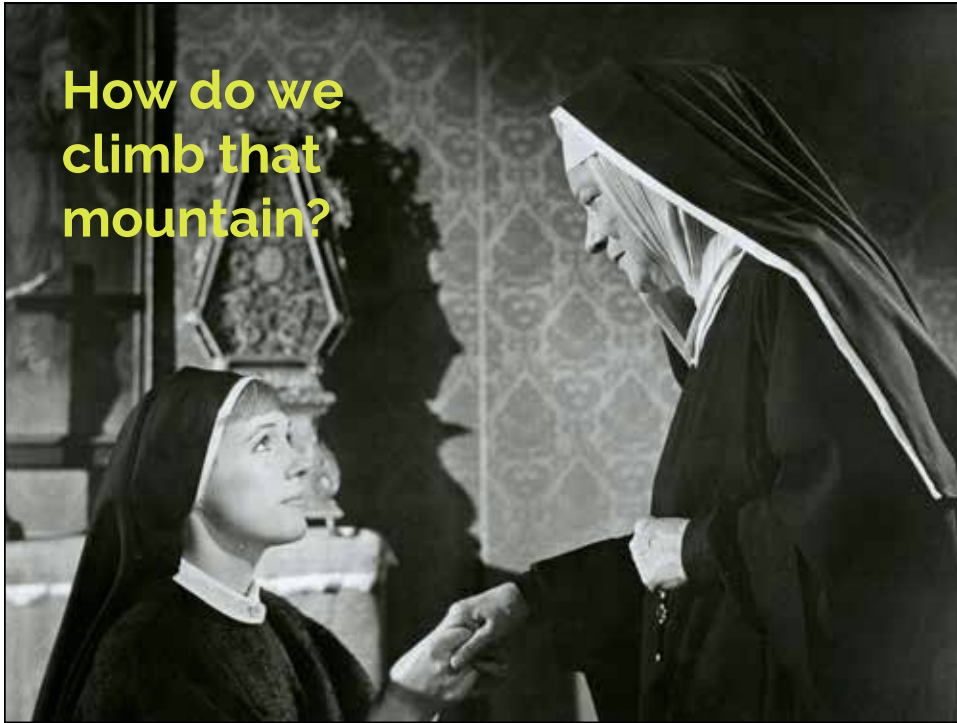
# After



If you only had time to make *one* change to your current work, which of these would yield the most impact?

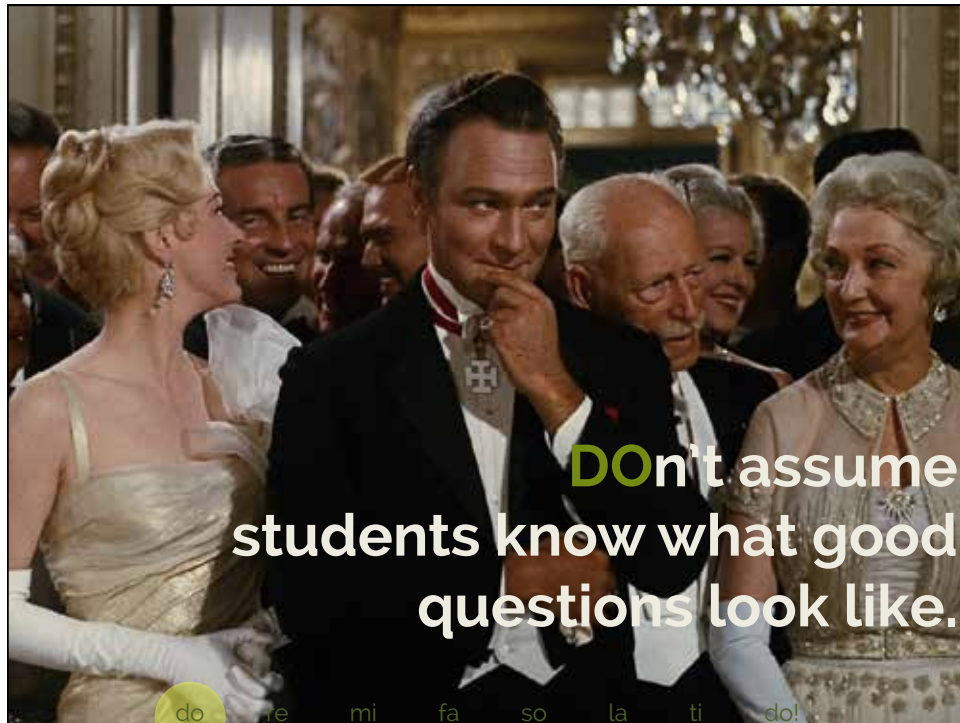


How do we  
climb that  
mountain?



Let's start at the very beginning ...






## Red Light Questions

(Levitov; Fontichiaro & Johnson, et al)

- STOPS research from going further
- Require a single factual answer
- Often start with **who, what, where, when, how many**
  - Who did George Washington marry?
  - What happened in the story after Winnie refused to drink the immortality water?
  - Where did the Confederate Army surrender?
  - When did Marie Curie report her findings on radium?
  - How many people live in Tennessee?

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	<p>Animal Research</p> <p>My animal is the <u>ostrich</u>.</p> <p>It is a <u>bird</u>.</p> <p>Its size is <u>7-9 feet</u>.</p> <p>It lives in <u>Africa and zoos</u>.</p> <p>It eats <u>plants, nuts, seeds, insects, lizards, other creatures</u>.</p> <p>Fascinating facts:  <u>Its eye is really big.</u>  <u>It is taller than a grown-up.</u>  <u>Their plumage blends well with the sandy soil.</u></p>  <p><a href="http://animals.nationalgeographic.com/animals/birds/ostrich/">http://animals.nationalgeographic.com/animals/birds/ostrich/</a></p>	
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<h2 style="color: green;">Green Light Questions</h2> <p>(Levitov; Fontichiaro &amp; Johnson, et al)</p> <ul style="list-style-type: none"> <li>• May require collection and synthesis of information</li> <li>• May have words in them like <b>why</b> or <b>how</b></li> <li>• May be focused around finding solutions to articulated problems (see next slide)</li> <li>• Similar to “essential questions,” “thematic questions”</li> </ul>
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## **RE**fresh their prior knowledge or build it up.

- They don't know anything about the topic yet.
- Try a picture book, easy encyclopedia entry, image discussion, or video to build up prior knowledge, help them become familiar with topic-specific vocabulary and concepts.

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## **MI**nimize teacher-produced questions.

- Invite groups to brainstorm questions.
- Place teacher in the role of scribe.
- Let students borrow questions from one another.

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## FActs out of context are boring. Try a scenario.

Select a lighthouse. Tell us the history of the lighthouse, its first keeper, the kind of lens it has, where it is located, and whether it is on the mainland or an island. *Spelling and grammar count!*

VS.

The Governor of Michigan has proposed selling off ten lighthouses in order to reduce state costs. Identify an existing lighthouse that could be turned into a new kind of business to profit our state. Use PowerPoint to create a proposal you can share at her next open meeting. Think about your audience when planning!

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## FA-raming Strategies

- **Situate the topic in the student's home, work, school, or social life.**
  - How would this impact your family?
  - What if this were in your backyard?
  - How should the principal react to \_\_\_?
- **Tell a story. Ask students to do research to finish it.**
  - The three pigs want to build another house. The hardware store is out of straw, wood, and brick. What would be another good insulator? Why?
- **Flip history.**
  - How might the U.S. be different today if the war ended at Gettysburg instead?

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**LA**unch work on arguments to help even young thinkers connect their infobits.

- Statement
  - Evidence
  - Evidence
  - Evidence
- Reiteration of statement
- *George Washington was a great president.*
  - *During the Revolutionary War, he led the troops.*
  - *He brought calm to the early days of our independence.*
  - *He picked advisors who were wise.*
- *For these reasons, George Washington is a president we should remember and celebrate.*

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## Time is limited.



1. sprints and not marathons
2. could you skip making a product and do oral sharing?

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## We are Done!

- Questions?
- Ideas?
- Kristin Fontichiaro  
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