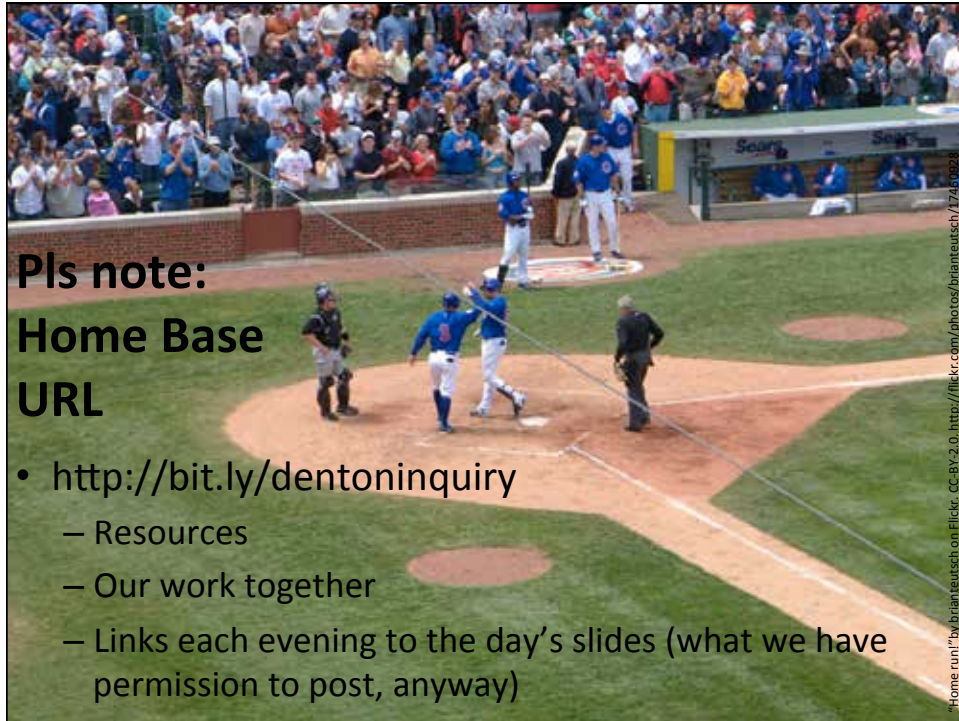


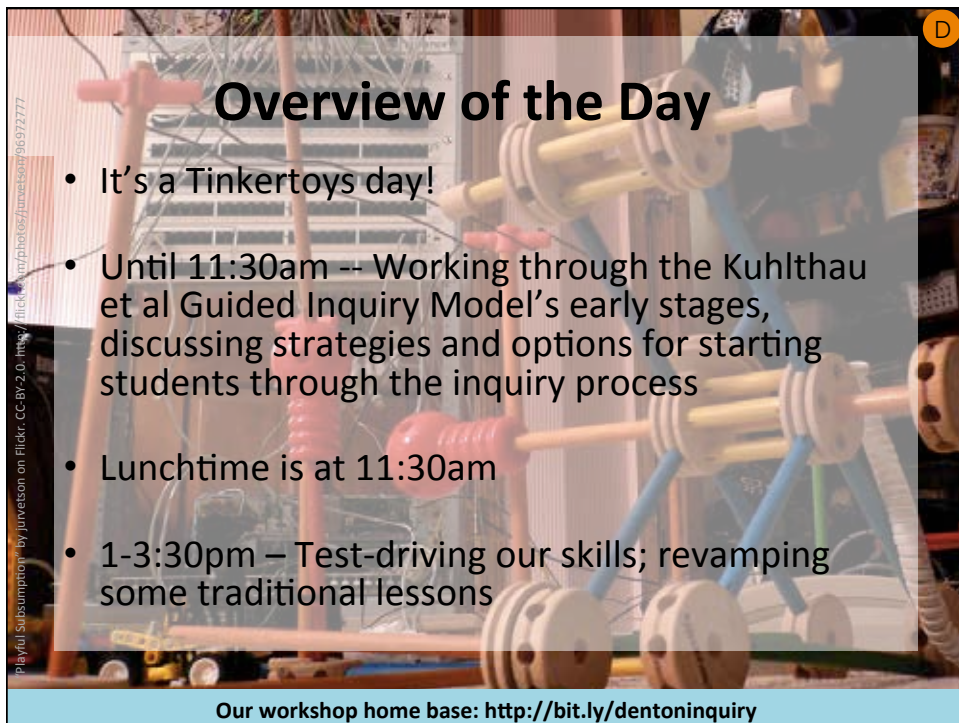
Hello, We're Kristin & Debbie



**Pls note:
Home Base
URL**

- <http://bit.ly/dentoninquiry>
 - Resources
 - Our work together
 - Links each evening to the day's slides (what we have permission to post, anyway)

Home run! by brianneusch on Flickr. CC-BY-2.0. <http://flickr.com/photos/brianneusch/77491928>



Overview of the Day

- It's a Tinkertoys day!
- Until 11:30am -- Working through the Kuhlthau et al Guided Inquiry Model's early stages, discussing strategies and options for starting students through the inquiry process
- Lunchtime is at 11:30am
- 1-3:30pm – Test-driving our skills; revamping some traditional lessons

Our workshop home base: <http://bit.ly/dentoninquiry>

Playful Subsumption by Juvetson on Flickr. CC-BY-2.0. <http://flickr.com/photos/juvetson/96972777>



"Blank index card" by dgray_xplane on Flickr. CC-BY-2.0. <http://flickr.com/photos/davegray/147874576>

What's your take on inquiry?

Sketch the process as it comes to mind.

Resist the urge to look something up! 😊

Our workshop home base: <http://bit.ly/dentoninquiry>



Turn and Talk to Share

Go to our home base page and click on “Inquiry is ... but isn’t...” Add to each of the table’s two columns.

This page’s table of contents:

- [Inquiry is ... but isn’t ...](#)
- [Daily Slides \(posted each evening after the workshop\)](#)
- [Contact Us!](#)

|

Inquiry is ... but isn’t ...

How do you know if a research project is inquiry? What are elements that do not represent inquiry? Share your ideas below.

Inquiry is ...	But it’s not ...

How did that exercise help you understand this better?



"AHA" by speedphotos on Flickr. CC-BY-ND-2.0. <http://flickr.com/photos/dalelafollette/14492790376>

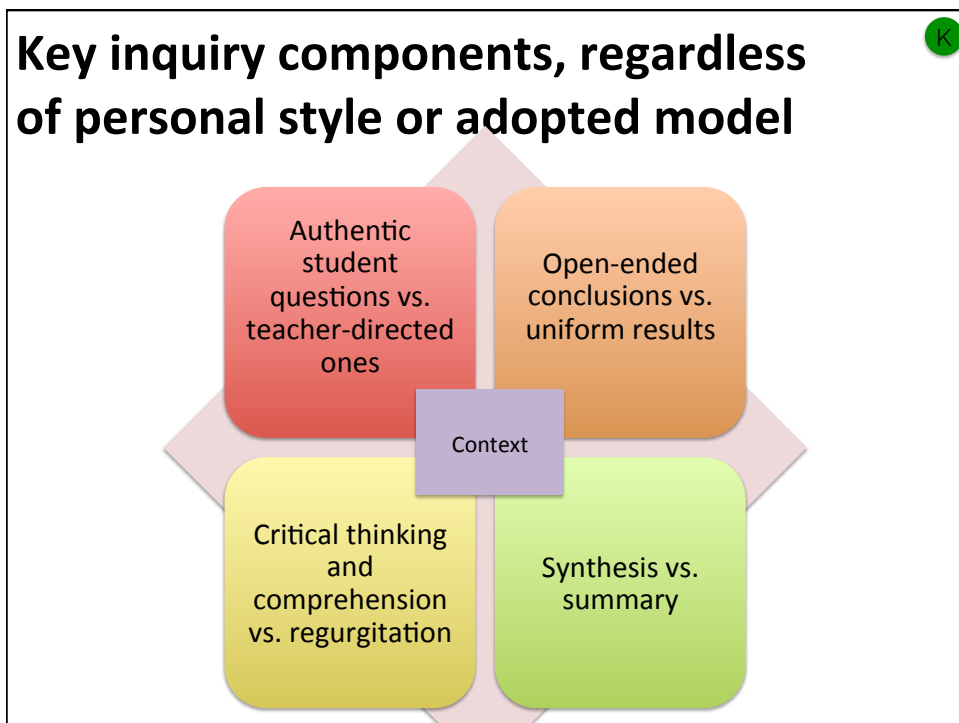
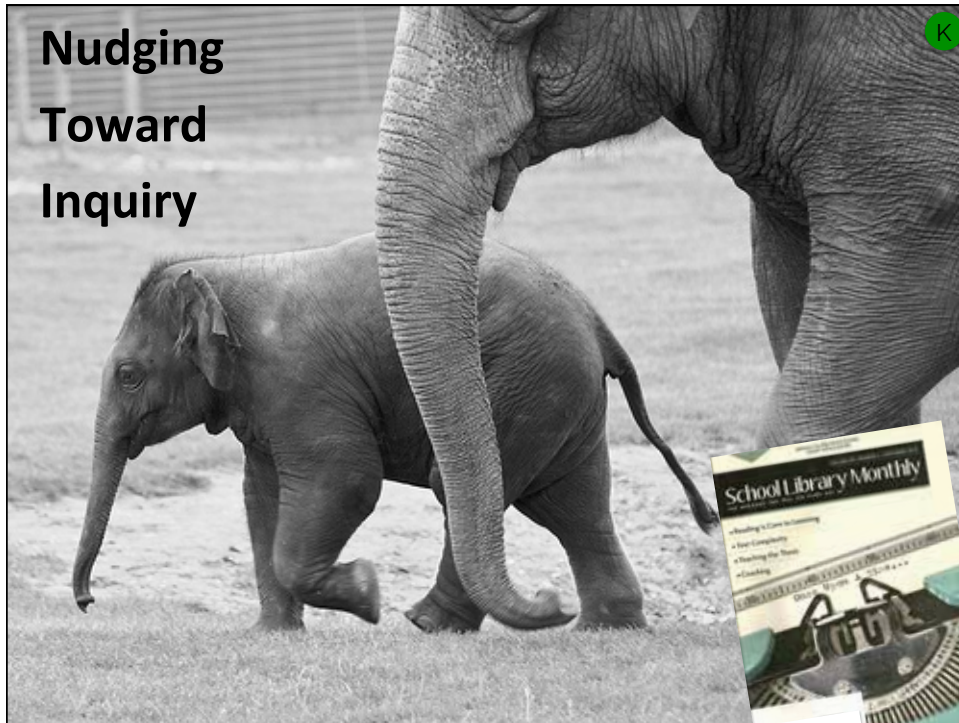
How can this understanding impact how you teach?



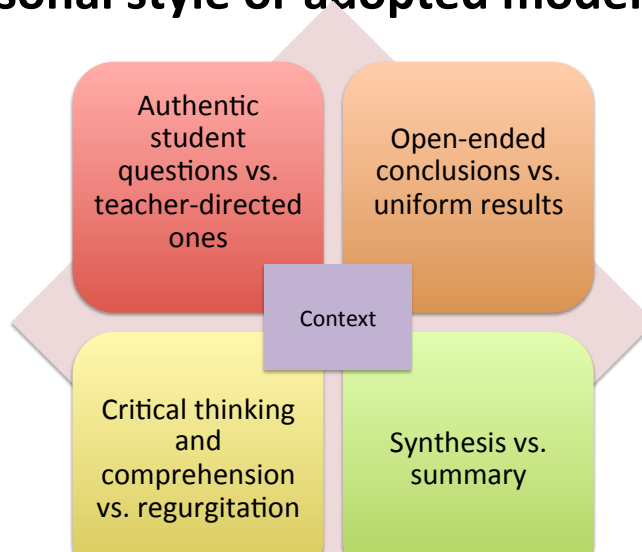
EVOLUTION *not* REVOLUTION

Image: TheNounProject.com CC-BY.



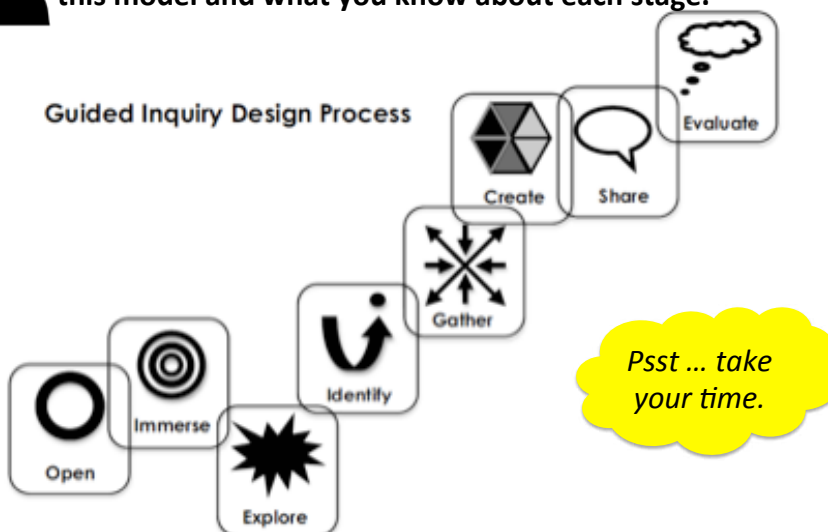


Key inquiry components, regardless of personal style or adopted model




Identify where you could add these into your model and pencil them in!

If you went to the three-day workshop, raise your hand ... pick someone(s) who didn't go and talk them through this model and what you know about each stage.

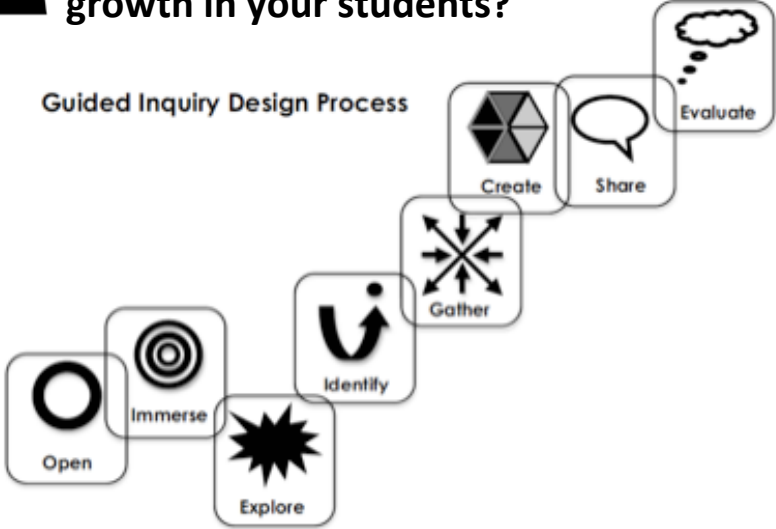


"Whisper" by Chris Dawson on TheNounProject.com. CC-BY-3.0.
<http://thenounproject.com/term/whisper/23334/>

Kuhlthau, Maniotes, and Caspari, 2012, p. 31

 **Turn & Talk: At which stage(s) would changing your practice yield the greatest growth in your students?** K

Guided Inquiry Design Process

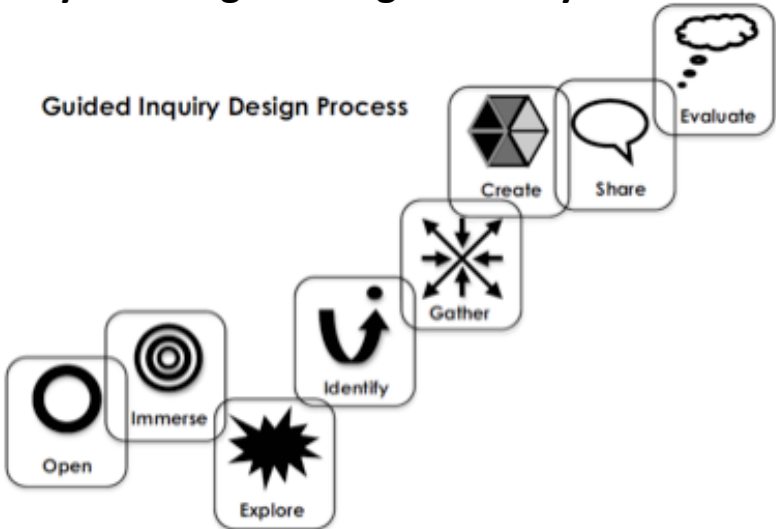


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Kuhlthau, Maniotes, and Caspari, 2012, p. 31

Share Out: At which stage(s) would changing your practice yield the greatest growth in your students?? K

Guided Inquiry Design Process



Kuhlthau, Maniotes, and Caspari, 2012, p. 31



Break! Back in 15 minutes – _____

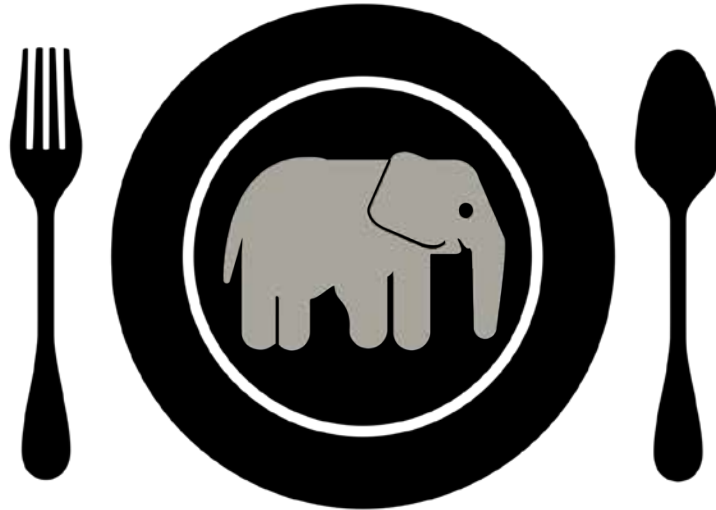
"2 hour nap" by Shan213 on Flickr. CC-BY-SA-2.0.
<http://flickr.com/photos/shan213/13311840895>



Welcome back! Parking lot questions? Comments?

Tokyo Parking Lot" by Kevin Krejci on Flickr. CC-BY-2.0. <http://flickr.com/photos/kevinkrejci/3251981473>

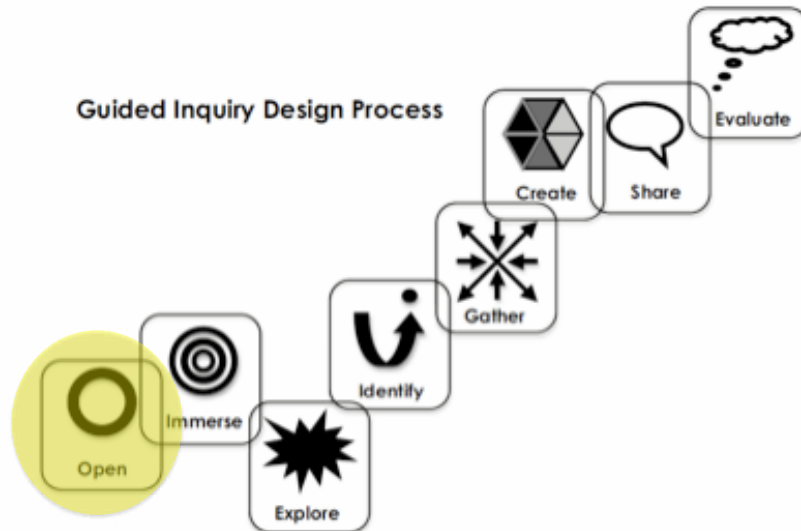
How do you eat an elephant?



"Plate" by Brennan Novak for TheNounProject.com. Public Domain. <http://thenounproject.com/term/plate/12611/>.
"Elephant" by Sean Henderson for TheNounProject.com. CC-BY-3.0. <http://thenounproject.com/term/elephant/12446/>




Guided Inquiry Design Process



Kuhlthau, Maniotes, and Caspari, 2012, p. 31

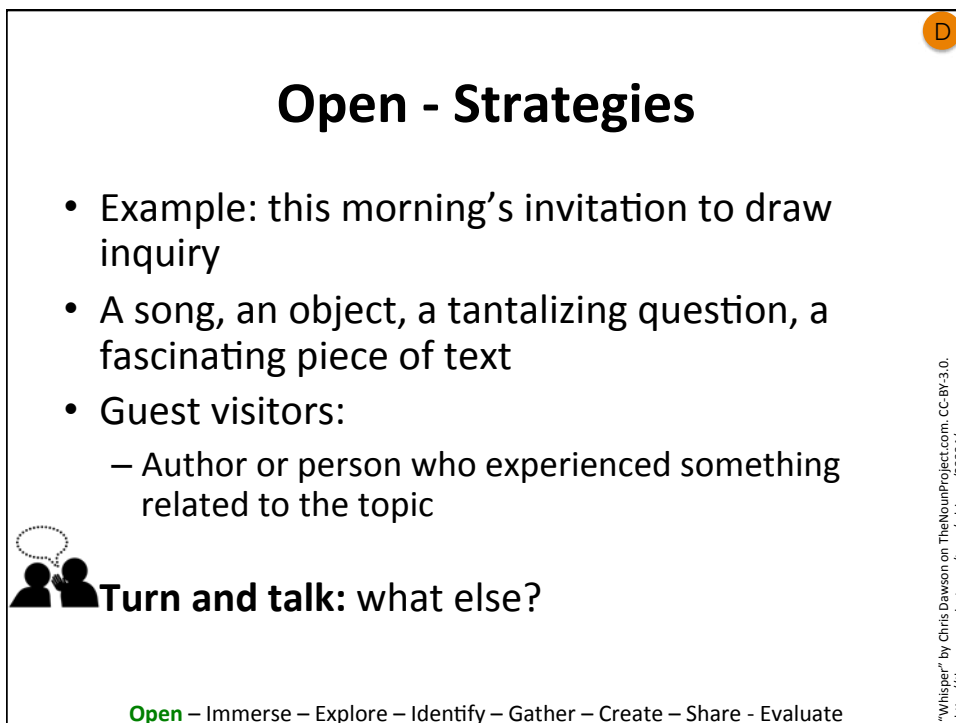
Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate



Open – Definition


- Invitation to inquiry
- Open minds
- Stimulate curiosity
- Hook ‘em

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate



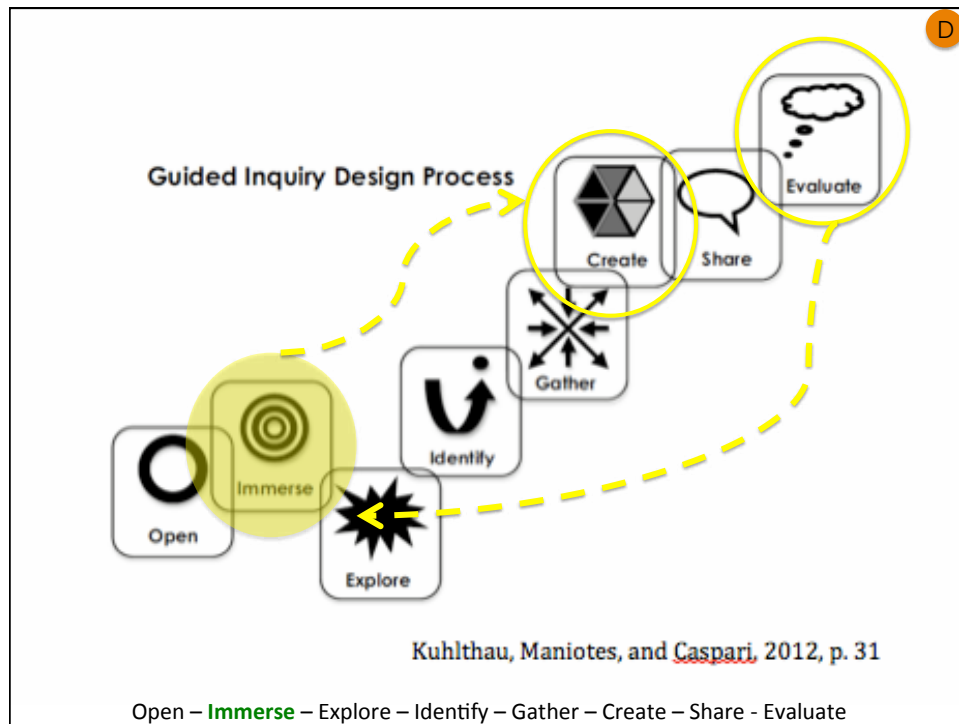
Open - Strategies

- Example: this morning’s invitation to draw inquiry
- A song, an object, a tantalizing question, a fascinating piece of text
- Guest visitors:
 - Author or person who experienced something related to the topic

 **Turn and talk: what else?**

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate

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K

Immerse - Definition

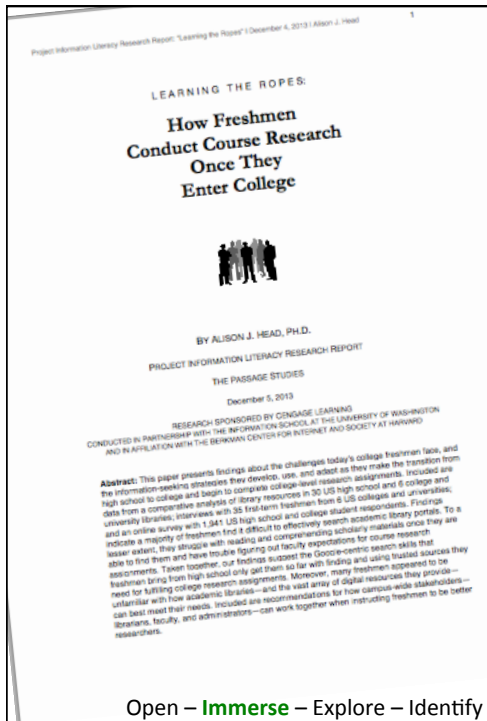
- Build background knowledge about content and process
 - Research process diagrams
 - Keywords
 - Misconceptions
- Connect to content
- Discover interesting ideas
- And don't forget ... what do students need to know about what is expected at the end? This gives them a necessary lens through which to view the topic
 - Audience
 - Product
 - Scope

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate



Why prior knowledge matters ...

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate



December 2013
bit.ly/pil-freshmen

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate

Figure 4: Which individual research tasks were most difficult for first-term freshmen?

Most Difficult Research Tasks	Count	Frequency
1. Coming up with keywords to narrow down searches on the academic library portal	26	74%
2. Filtering and sorting through irrelevant results from online searches	20	57%
3. Identifying/selecting potential sources and investigative methods from all available	18	51%
4. Integrating and summarizing writing styles from different sources/formats	15	43%
5. Delineating assignment parameters and defining and selecting a topic	13	37%
6. Reading and comprehending materials from different formats	12	34%
7. Locating print information from search results (i.e., articles, books, chapters)	8	23%
8. Asking for help with research from faculty, librarians, or fellow students	6	17%
9. Evaluating sources for credibility and bias while reconciling different viewpoints	5	14%
10. Citing sources and using citation formats, based on faculty preferences	3	9%
11. Self-assessment of research process used and the sources found	3	9%
12. Technological issues, includes connectivity and authenticating logins	3	9%
13. Managing and organizing results from print and online sources	2	6%
14. Developing new understandings in order to formulate an original thesis/proposition	2	6%

Open – Immerse – Explore – Identify – Gather – Create – Share – Evaluate

Ordered from most frequent to least frequent difficulties with college research, according to 35 first-term freshmen, 6 campuses.

Figure 7: Adaptive Strategies for College-Level Research

New Information Competencies for College
1. Discovering peer-reviewed article abstracts and their usefulness.
2. Using Google for finding keywords and checking authors' credibility.
3. Replacing Google searches with Google Scholar searches.
4. Following the "citation trail" to find related research sources.
5. Using the college library as a refuge and source of professional help.

Ordered from interviewees' most discussed to least discussed adaptive strategies; n = 35 first-term freshmen, 6 campuses

Open – Immerse – Explore – Identify – Gather – Create – Share – Evaluate

Immersion Strategies K



"Vancouver Aquarium Immersion" by photodreamz on Flickr. CC-BY-2.0. <http://flickr.com/photos/photog/5560062653>

Open – Immerse – Explore – Identify – Gather – Create – Share – Evaluate

If I don't know anything, I can't build good questions. K

	K	W	L
Ogle 1986	What do I know ?	What do I want to know?	What have I learned ?
KWL a la Sandy Buczynski	What do I <i>think</i> I know ?	What do I wonder ?	What have I learned ?

What questions do you have about Higgs boson?

Ummm, what movies has he been in?

Tip: Make a K-W-L template on your wiki or as a GoogleDoc, and you'll always have it ready to go!

Open – Immerse – Explore – Identify – Gather – Create – Share – Evaluate

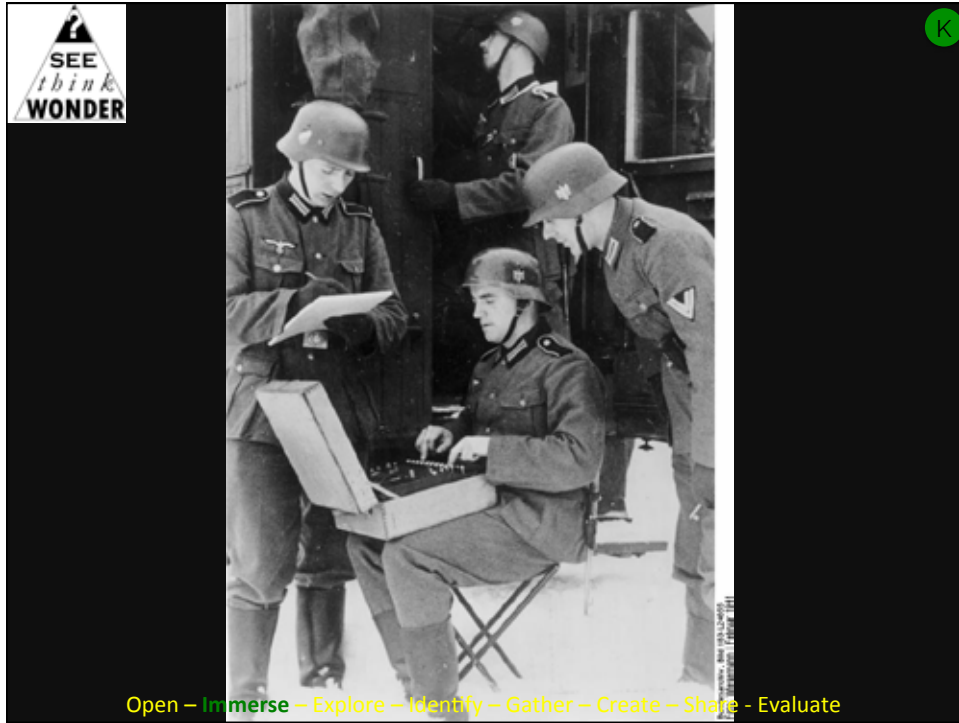
Immersion with Images: See-Think-Wonder



"Vancouver Aquarium Immersion" by photodreamz on Flickr. CC-BY-2.0.
<http://flickr.com/photos/photog/75560062653>

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate



Citation Information

Bundesarchiv Bild 183-L24655, Polen, Funker mit Verschlüsselungsgerät "Enigma" CC-BY-SA 3.0-de

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Steel helmets

For documentary purposes the German Federal Archive often retained the original image captions, which may be erroneous, biased, obsolete or politically extreme. Generalsouvernement: Eine Funkkompanie im Einsatz. Der Feind hört mit. Also wird der Funkspruch verschlüsselt. PK - Wiesemann 2649-41, Febr. 1941

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 1841 in Poland, Enigma machine in use, Images from the German Federal Archive

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Open - Immerse - Explore - Identify - Gather - Create - Share - Evaluate

Immersion with Text

- Group discussion: Favorite strategies for helping students read text critically?

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate

Immersion with Text: Overview

Don't Let Your Children Grow Up to Be Farmers

By BREN SMITH AUG 9, 2014



NEW HAVEN — AT a farm-to-table dinner recently, I sat huddled in a corner with some other farmers, out of earshot of the foodies happily eating kale and freshly shucked oysters. We were comparing business models and profit margins, and it quickly became clear that all of us were working in the red.

The dirty secret of the food movement is that the much-celebrated small-scale farmer isn't making a living. After the tools are put away, we head out to second and third jobs to keep our farms afloat.



<http://www.nytimes.com/2014/08/10/opinion/sunday/dont-let-your-children-grow-up-to-be-farmers.html>

Open – Immerse – Explore – Identify – Gather – Create – Share - Evaluate

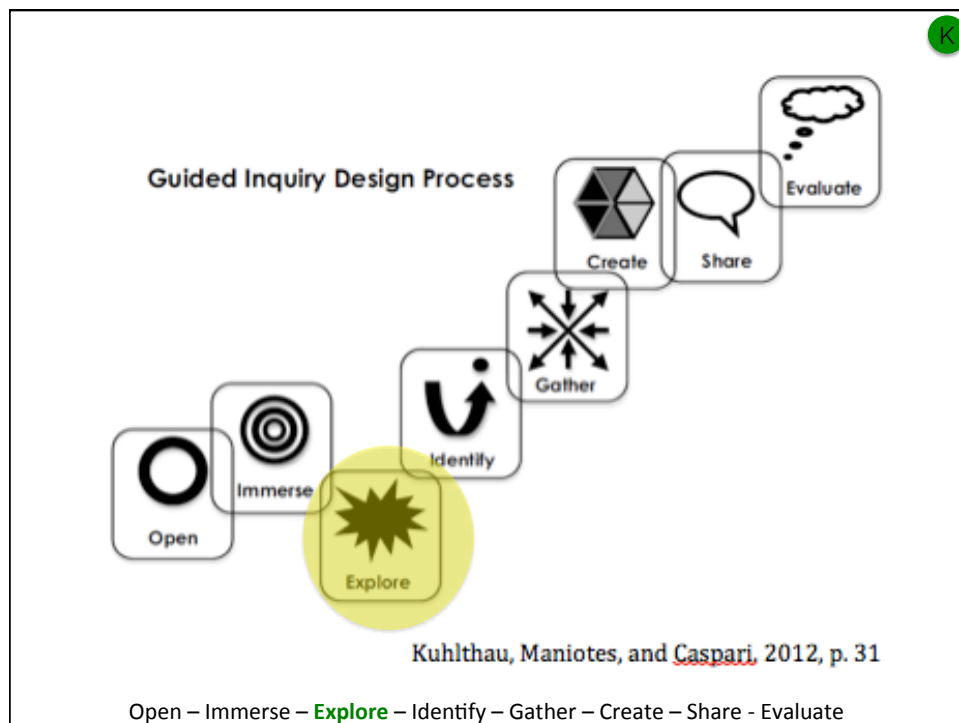


A visual strategy to clarify what you don't know



Polling Around the Room

- Take your sticky notes, dots, and pens around the room. Respond to the questions posed on the chart paper:
 - **Add a dot** to the inquiry confidence vs. experience graph
 - **Add dot** to excitement continuum
 - **Add dot** to the info lit coursework table
 - **Add sticky note(s)** to what do you hope we will learn page
 - **Add sticky note(s)** to worries about inquiry page



Explore - Definition

- Explore interesting ideas
- Look around
- Dip in
- “Browse” the topic
- Gain “skeletal” keywords, important ideas

Remember:
This is still
pre-search!

Open – Immerse – **Explore** – Identify – Gather – Create – Share - Evaluate



Turn & Talk: Your strategies for “tasting” a topic?

Open – Immerse – **Explore** – Identify – Gather – Create – Share - Evaluate

“Whisper,” by Chris Dawson on TheNounProject.com. CC-BY-3.0.
<http://thenounproject.com/term/whisper/23334/>

Share Out:
Your strategies for “tasting” a topic?



Open – Immerse – **Explore** – Identify – Gather – Create – Share - Evaluate

**Encyclopedias are great starting
points!**



Open – Immerse – **Explore** – Identify – Gather – Create – Share - Evaluate

A word about Wikipedia ...

WIKIPEDIA

The Free Encyclopedia
4 570 000+ articles

English

Español
La enciclopedia libre
1 115 000+ artículos

日本語
フリー百科事典
920 000+ 記事

Русский
Свободная энциклопедия
1 134 000+ статей

Français
L'encyclopédie libre
1 529 000+ articles

中文
自由的百科全书
780 000+ 條目

Português
Enciclopédia livre
1 000+ artigos

Find Wikipedia in a language:

Open – Immerse – **Explore** – Identify – Gather – Create – Share – Evaluate

simple.wikipedia.org

Simple English WIKIPEDIA

WELCOME TO WIKIPEDIA

the free encyclopedia that anyone can change

Search the 115,433 articles in the Simple English Wikipedia

How to write Simple English pages - Useful pages - Simple talk - Categories - Help - Schools Gateway (for users who want to make changes from a school)

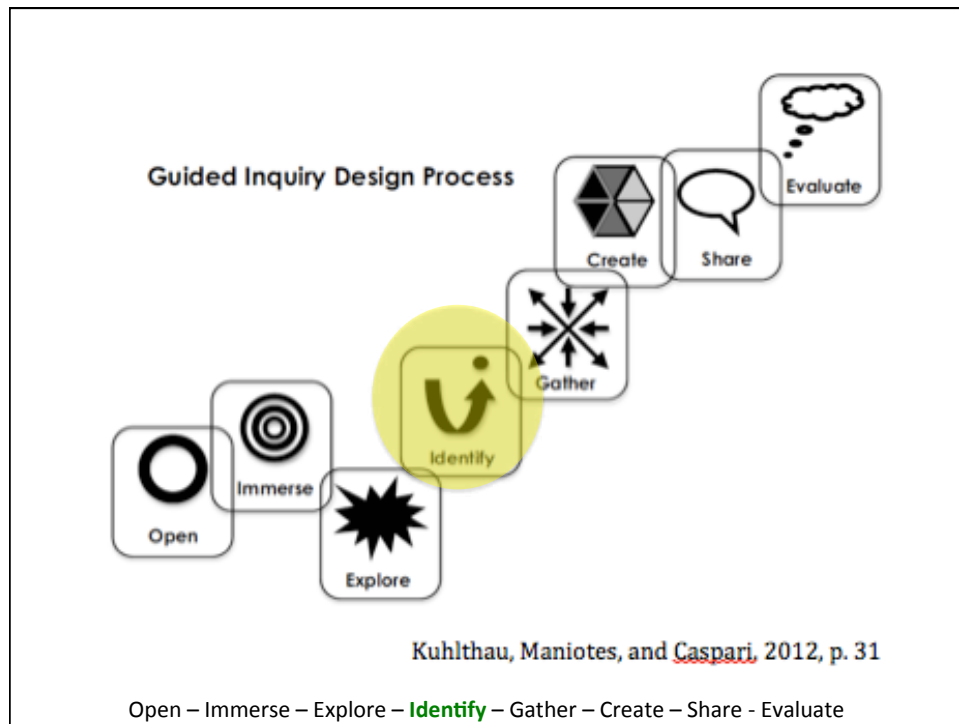
About Wikipedia

This is the front page of the Simple English Wikipedia. Wikipedias are places where people work together to write encyclopedias in different languages. We use Simple English words and grammar here. The Simple English Wikipedia is for everyone! That includes children and adults who are learning English. There are 115,433 articles on the Simple English Wikipedia. All of the pages are free to use. They have all been published under both the Creative Commons Attribution-ShareAlike License 3.0 and the GNU Free Documentation License. You can help here! You may change these pages and make new pages. Read the help pages and other pages to learn how to write pages here. If you need help, use our page.

Selected article

Hurricane Vince was an unusual hurricane that began in the north-east Atlantic Ocean. It was part of the 2005 Atlantic hurricane season. The waters where it formed were thought to be too cold for tropical cyclones to exist. Vince was the 30th named storm and 12th hurricane of the season. The storm that became Vince started out as an extratropical

Open – Immerse – **Explore** – Identify – Gather – Create – Share – Evaluate



Identify – Definition (1)

- **“Pause and ponder”**



- Take time to think! {**Build in** time to think!}
- **Turn and talk:** what does this mean?
- How do you do this in real life?

Open – Immerse – Explore – **Identify** – Gather – Create – Share - Evaluate

Identify – Definition (2)

- **Identify inquiry question & decide the direction forward**
 - What part of this topic is really where I should head?
 - What kinds of resources will help me most?

Open – Immerse – Explore – **Identify** – Gather – Create – Share - Evaluate

Building Good Questions: Basics

Open – Immerse – Explore – **Identify** – Gather – Create – Share - Evaluate

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?

Open – Immerse – Explore – **Identify** – Gather – Create – Share - Evaluate

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/>

Open – Immerse – Explore – **Identify** – Gather – Create – Share - Evaluate

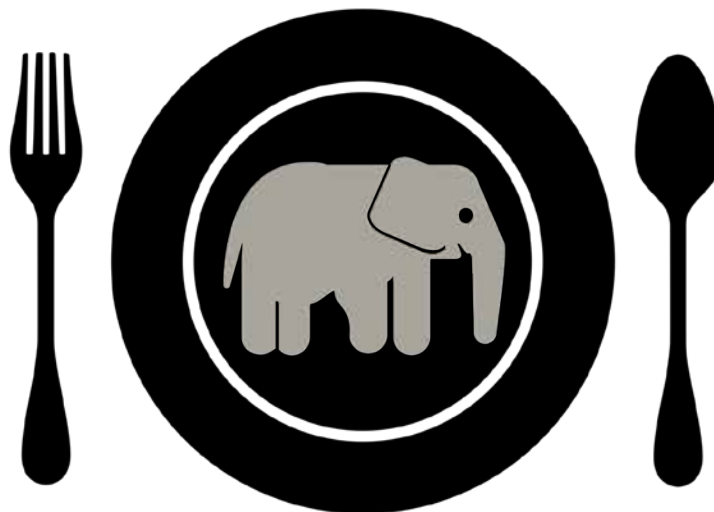
Green Light Questions

(Levitov; Fontichiaro & Johnson, et al)

- May require collection and synthesis of information
- May have words in them like **why** or **how**
- May be focused around finding solutions to articulated problems
- Similar to “essential questions,” “thematic questions”

Open – Immerse – Explore – **Identify** – Gather – Create – Share - Evaluate

LUNCH BREAK! See you at 1pm!



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"Elephant" by Sean Henderson for TheNounProject.com. CC-BY-3.0. <http://thenounproject.com/term/elephant/12446/>

Afternoon Agenda

- Framing Scenarios
- Lesson Plan Makeover
- Rubrics



"Feel the Frame Friday" by JD Hancock on Flickr. CC-BY-2.0. <http://flickr.com/photos/jdhancock/3996995204>

BEFORE: 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!*

AFTER: 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!

K

"Wall Frame 102" by mrcangrejero on Flickr. CC-BY-2.0. <http://flickr.com/photos/mrcangrejero/9002620809>

Framing 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?
- **Advise an expert.**
 - What issues should President Obama consider before making a policy move about ____?

Open – Immerse – Explore – **Identify** – Gather – Create – Share – Evaluate

K

Your Turn!

- Go to our home base:
<http://bit.ly/dentoinquiry>
- Click on “Your Framing Strategies for Classic Research Topics”
- Add your ideas!
 - Rules of thumb to ponder as you come up with possible ideas:
 - “Will students be able to explore my topic with their own path of questions and findings?”
 - “Will all projects have the potential to have unique solutions?”

Lesson Plan Makeover

(approx. 40 min. + break = back at 2:50)

- We’ve pulled 3 lesson plans off the web. Find your link at our home base (<http://bit.ly/dentoinquiry>).
- Work in teams of three with job-alike groups: EL with EL, MS with MS, HS with academics.
- Read through the lesson plans. All are solid traditional research plans, but none are inquiry.
- Discuss as a group: how would I frontload these to encourage more inquiry?
- Take a look at the rubric. What is being assessed? What isn’t? What should be in an inquiry lesson?
- See the directions for sharing your thoughts on the home base page.
- **Do not rewrite. The goal here is to recognize opportunities for inquiry.**

Report Out To Large Group

- Choose a juicy tip or tidbit from your group's discussion. These could be (but are not restricted to):
 - what jumped out at you that immediately felt “inquiry” or “not inquiry”
 - how you identified priority areas to make over
 - what you learned

A few things I like to keep in mind re: rubrics:

- Rubrics vs. checklists
- Non-uniformity of “boxes” means better range of grades (Humphry and Heldsinger 2014)
- Avoid rubric items that count
- Add up the points: how many are going to format? How many to process? How many to thinking? Are you comfortable with those proportions?

We are done! Parking lot questions? Comments?



Tokyo Parking Lot by Kevin Krejci on Flickr. CC-BY-2.0. <http://flickr.com/photos/kevinkrejci/3251981473>

END OF DAY ONE