

Nudging Toward Inquiry

SLAQ @ Brisbane
17 Aug 2013, 10:15am – noon

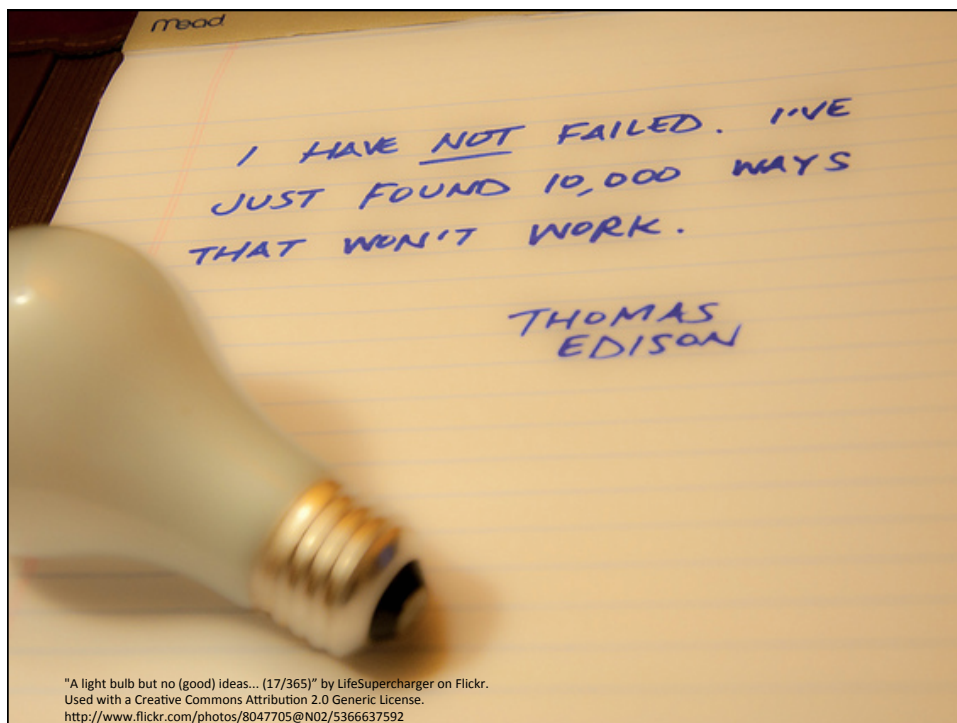
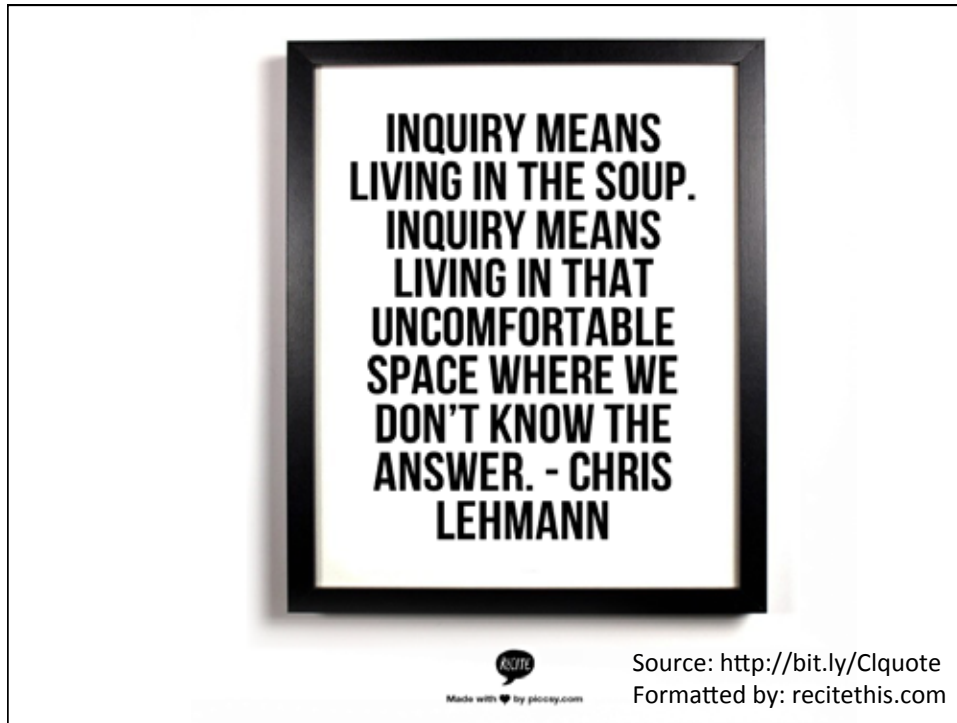
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@activelearning

Follow along with
today's slides at
<http://bit.ly/fontblog>



Backchannel
(And the WhoWhatWhenWhereWhy
of backchannels)

todaysmeet.com/slaq



**We know kids
could be more actively
engaged in learning and
that we could raise the bar
for many of them.**

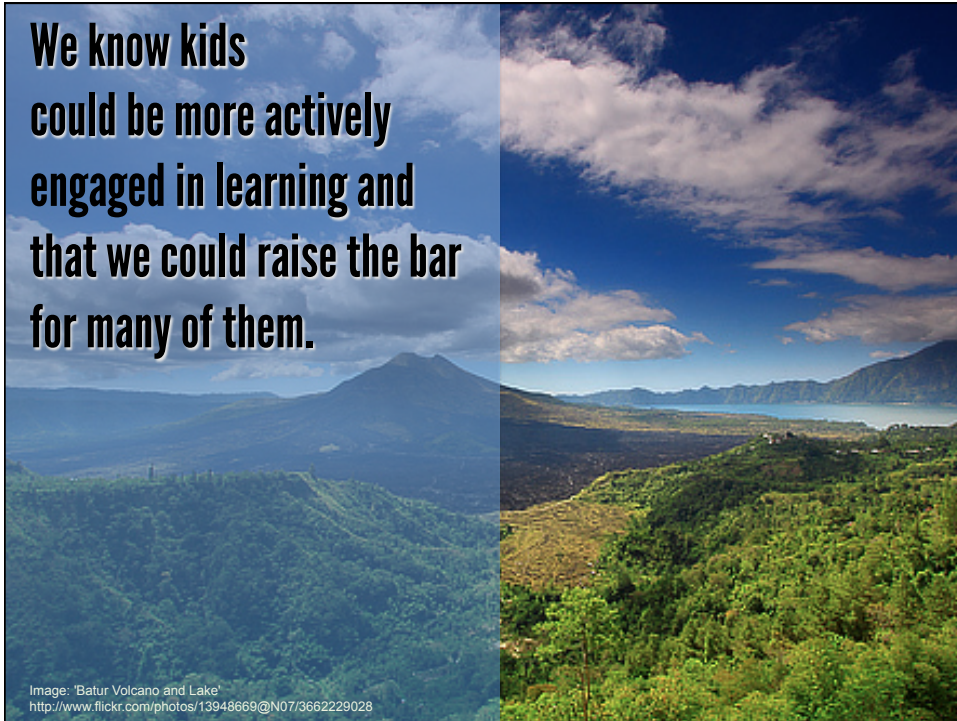



Image: 'Batur Volcano and Lake'
<http://www.flickr.com/photos/13948669@N07/3662229028>



**Connecting people, information, and technology
in *more valuable ways***

Image: canada.com



<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - “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”)
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Stripling’s Inquiry Model

(SLM, 4/07 and 9/09)

- **Connect**
(awaken prior knowledge)
- **Wonder**
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- **Express**
(create product)
- **Reflect**
(consider effectiveness of process/product)



Connect

It's All About Prior Knowledge

- Awakening it
- Building it



Connect ~ Wonder ~ Investigate ~ Construct ~ Express ~ Reflect



Do you know what this zone is for?



<http://www.flickr.com/photos/dambert/253845905/>

**Milwaukee Airport:
Where you go after going through security to put
your belt/shoes/jacket back on**



Is this funny? If so, why?



Translation tip

<http://bit.ly/janeaustenatthesuperbowl>

Is this funny? If so, why?

WHY DO BIRDS SUDDENLY
APPEAR EVERYTIME YOU
ARE NEAR ?



BECAUSE
I AM A
WORM

<http://bit.ly/doodlebyandre>

And one more?



Copyrighted by Style Weekly; comic by Ed Harrington
[http://www.styleweekly.com/richmond/the-hr-department/Content?
oid=1729565](http://www.styleweekly.com/richmond/the-hr-department/Content?oid=1729565)

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

	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, and you'll
always have it
ready to go!

Connect ~ Wonder ~ Investigate ~ Construct ~ Express ~ Reflect

Connect: What Can Go Wrong?

- Time
 - Try: A reading the night before
 - Try: A primary source image in a discussion forum for homework
 - Try: A 2-minute video/audio clip or a photo discussion in class
 - Try: A 3D object
- Note: problems with Connect may not show up until the next phase, which is...

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Wonder



- Questions
- Hypotheses
- Class graphic organizer based on discussion
- Brainstorming in groups
- Outline objective, then give questions



Connect ~ Wonder ~ Investigate ~ Construct ~ Express ~ Reflect



Citation Information

lickr Sign Up Explore Upload

Brisbane schoolchildren waiting to be immunised against diphtheria, 1943

Author: Unidentified
Location: Brisbane, Queensland

Description: Caption: Wiping out diphtheria: Children lined up for immunisation against diphtheria at one of the suburban schools. Since 1931 50,847 children have been immunised free of charge.
View this image at the State Library of Queensland: hdl.handle.net/10462/dsmv/112790
Information about State Library of Queensland's collection: picture@library.qld.gov.au/

zgmastedesigns, and 7 other people added this photo to their favorites.

Add a comment
Post Comment

State Library Queensland
State Library of Queensland
Member since 2008

Taken some time in 1943
Brisbane, Queensland, AU
1,510 Views
1 Gallery

Additional info (show more)
No known copyright restrictions (1)

CC Attribution Helper
Attribution (HTML)
http://www.flickr.com/photos/statelibraryqueensland/6753446405/
Attribution (text)
cc licensed () flickr photo by State Library

<http://www.flickr.com/photos/statelibraryqueensland/6753446405/>



Citation Information

The screenshot shows a Flickr page for a black and white photograph. The photo is titled "Queen Elizabeth visiting Cairns on the Royal tour". The creator is listed as "Undertitled". The location is "Cairns, Queensland". The description states: "Queen Elizabeth visiting Cairns, Queensland, March 1954. View this image at the State Library of Queensland: hdl.handle.net/19483/dsm/65163. Information about State Library of Queensland's collection: pictures@slq.slq.qld.gov.au". The photo was taken in March 1954 in Cairns, Queensland, AU, and has 619 views. The uploader is "State Library Queensland", a member since 2008. There are options to share, grab the link, and grab the HTML5 code. A comment box is visible with the text "Add a comment" and a "Post Comment" button. Attribution information is also present: "Attribution (HTML) #2 1954 Queen Elizabeth visiting".

<http://www.flickr.com/photos/statelibraryqueensland/6944865095/>



Pool Your Knowledge!

- **Analog**
 - Whiteboard (*bansho*)
 - Sticky notes
- **Digital**
 - Wallwisher.com
 - openEtherpad.com
 - Wiki page
 - Google Docs



Wonder: What Can Go Wrong?

- **Time**
 - Try: not every project needs to follow each step
- **Low level questions**
 - Try: More background knowledge
 - Try: Non-textual modalities (e.g., video, audio, images)
- **Lack of engagement**
 - Try: Group work, team brainstorming challenges a la Boggle

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Investigate (Info Lit)

- Search strategies
- Credibility
- Open Web
- Popular vs. Scholarly Sources
- Is a personal blog legit?
(Is a *NY Times* blog legit?)



http://www.ted.com/talks/eric_schmidt_191006045

Connect ~ Wonder ~ Investigate ~ Construct ~ Express ~ Reflect

Investigate: What Could Go Wrong?

- **Poor search skills/underdeveloped vocabulary**
 - Try: PD *for teachers* on better Google search strategies
 - Try: <http://mashable.com/2011/11/24/google-search-infographic/>
- **Poor sources**
 - Try: more teacher PD
 - Try: Valenza's video testimony idea
- **Too text-heavy**
 - Try: Flickr Commons, American Memory, video archives

Investigate: What Could Go Wrong?

- **Underdeveloped resource evaluation skills**
 - More teacher PD!
 - More prior knowledge time with students
 - Google Custom Search
- **Students only want Google**
 - Help them evaluate URLs before they click
 - Not all open web is bad
 - Bake source quality into the grade
 - Get a guest speaker from college classroom or library

Investigate: What Could Go Wrong?

- **Topic is too narrow**
 - Try: mini-conferencing to nudge it wider
- **Topic is too wide**
 - Try: “You have enough here for a TV marathon about the topic, but we only have time for one episode. What should that one episode focus on?”
- **Topic is unfocused**
 - Try: next slides

Frame the Project

Scenarios

Project-Based Learning

Problem-Based Learning

Real-World Situations



Frame the Project

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!*

OR

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!





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?



Your Turn: Turn and Talk

- Situate the topic in the student's home, work, school, or social life.
- Tell a story. Ask students to do research to finish it.
- Flip history.

How would you revamp?

- Research a medieval guild.
- Describe an alternative energy.
- Research a pet you would like.
- Make aboriginal art.

Share Your Ideas:
todaysmeet.com/slaq

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Construct



- What patterns in data/info do I see?
- What does all of this mean?
- New round of graphic organizers for sensemaking
- Pooling knowledge (*bansho*, discussion, wikis/Google Docs)

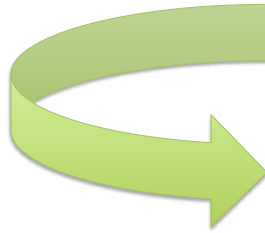
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Giraffe

From Wikipedia, the free encyclopedia

For other uses, see [Giraffe \(disambiguation\)](#).

The **giraffe** (*Giraffa camelopardalis*) is an African even-toed ungulate mammal, the tallest living terrestrial animal and the largest ruminant. Its specific name refers to its



- Giraffa camelopardalis
- African
- Even-toed
- Ungulate
- Mammal
- Tallest
- Largest
- Ruminant

Construct: What Could Go Wrong?

- **Teachers didn't learn digital-age research**
 - Some got by in college just reading abstracts
 - In past, just finding information was a success
 - The rules have changed!
 - Try: Offer PD hours to help them learn to be better researchers for their own ongoing coursework

Construct: What Could Go Wrong?

- **Step gets skipped**
 - Try: Post-mortem with teacher
 - “How did you feel?”
 - “Did you enjoy reading them?” (Teachers don’t like being bored!)
 - “I wonder if you could help me try something next time ...”

Construct: What Could Go Wrong?

- **Students don’t know how to synthesize**
 - Try: Scale back to classic essay
 - CCSS: supporting arguments with evidence
 - Try: Prompts and graphic organizers
 - “You said A, B, and C. Mash those up and make the idea fit on a bumper sticker/on a Tweet”
 - “I think _____ because _____.”
 - Try: Provide examples!
- **Time!**
 - Try: Skip “making a product”
 - Try: Not to cave! This is the big stuff!
 - Try: smaller projects that encompass just a few steps

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Express



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Express: What Could Go Wrong?

- **Too much time spent on aesthetics at the expense of content/processing**
 - Try: Choose tech tools judiciously
 - Try: Weigh the delight of novel tech tools against the orientation time it takes to learn them
 - Try: Set deadlines and prioritize aesthetic steps
 - Try: Review rubrics and guidelines; often, we accidentally over-emphasize aesthetics/layout

Express: What Could Go Wrong?

- **Too many people in a group, too many idle hands**
 - Try: Recalibrate collaborative work; make sure everyone has a similar *cognitive load*
- **Episodic work, not work that builds over time**
 - Try: Outlining (I know, it's old school)
- **Inauthentic products – “playing school”**
 - Try: “What would a real _____ create with what s/he has learned/”
- **Typing Speed**
 - Try: Oral sharing instead of making something

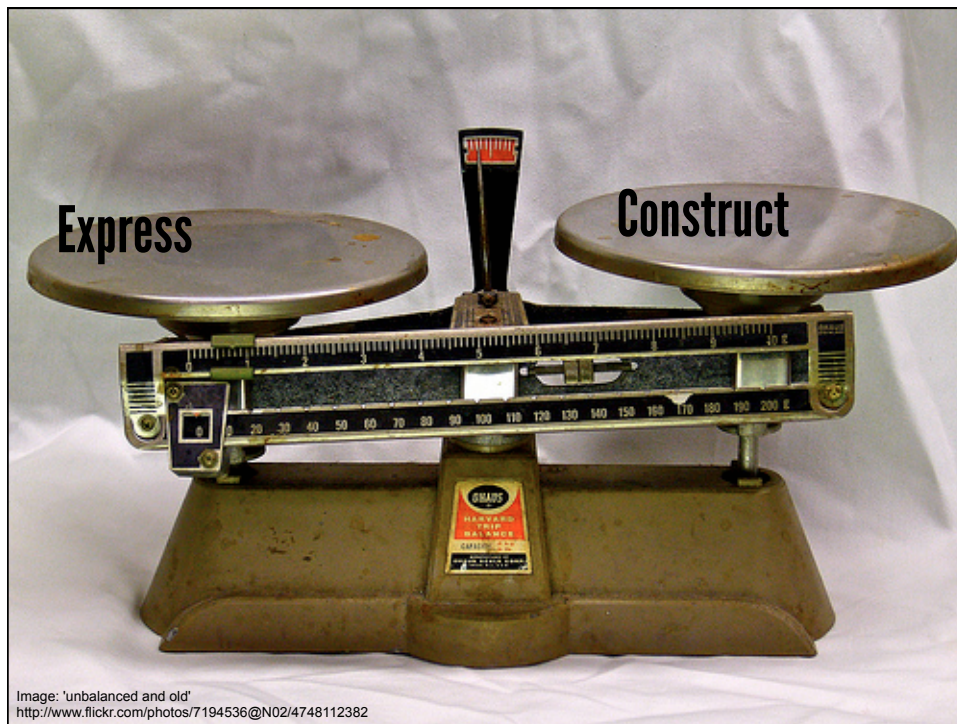


Image: 'unbalanced and old'
<http://www.flickr.com/photos/7194536@N02/4748112382>

The Parent-Teacher Conference Trap

- “We have to have something to put up for conferences!”
- Why not share process work – letting students explain where they are and where they’ re going – rather than cranking out non-challenging “projects”?

Image: What's That? (04)
<http://www.flickr.com/photos/44124348100@N01/4307463426>

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Reflect: What Could Go Wrong?

- **Gets saved until the last minute and then (surprise!) time runs out**
- **Kids who need to reflect most are still working during “reflection time”**
 - Try: Short reflections throughout process
 - Try: Pre-made exit slips (smiley face/frown; “I need help with...”)
 - Try: Mid-project form letters to instructors
 - Try: One-minute essays (index cards)
 - Try: Mini-conferences
 - Try: Video confessionals

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If we have time ... crowdsourced solutions!



GOAL:

**Learning *through*
resources, not *about*
resources**

Thanks!

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@activelearning



Today's slides:
<http://bit.ly/fontblog>