

UELMA 2014 – Questioning to Learn

Anne R. Diekema and Sheri Haderlie – USU Instructional Technology & Learning Sciences Department
URL: http://digitalcommons.usu.edu/itls_facpub/481/

Encouraging Curiosity Activity

“Curiosity is the wick in the candle of learning.” William Arthur Ward

“Curiosity is as much the parent of attention, as attention is of memory.” Richard Whately

Use the box below to record your answers/thoughts about the questions on slide 7

Understanding Questions Activity

With your group – change closed ? to open ?

On your own – for your own topic

Closed: _____

Open: _____

With your group – using the text on the back

On: _____

Between: _____

Beyond: _____

Learning to Question Activity

Using your own topic, fill out the chart below

| KNOWledge | | |
|---|--------------------------------|--------------------------------------|
| What do I K now | What do I N eed to know | W here can I find information |
| | | |
| What keywords and phrases will L ead me to information I need? | | |
| | | |

Dewey vs. Genre Shelving...the Conversation Continues Here

February 15, 2013. Posted by Jen Habley in ALA Midwinter Meeting, Check this out!, Hot Topics. [www.aasl.ala.org/aasblog/?p=3461]

At the recent ALA Midwinter Conference in Seattle, I moderated the AASL-sponsored Hot Topics discussion on "Genre-fying" the collection. Six panelists presented a variety of viewpoints on how to handle an issue that is being widely discussed. A number of librarians have implemented the change, reclassifying their nonfiction titles using letters identifying the genre. Some have used EBSCO's NovelList as a source for the categories they chose, others have used their own ideas. A few have integrated fiction within the nonfiction. A more limited approach is to "genre-fy" the fiction collection. Those who have made the change point to increased circulation. Librarians who think we should stay with Dewey argue that consistency between libraries is important and the amount of work to make the switch is huge.

Questioning to Learn Activity

Narrow and Focus research questions

| Question Starters | | Focusing Questions | | | Looking for Relationships | |
|-------------------|-------------|--------------------|-----------|-----------------|---------------------------|----------|
| Who | Discover | changes | types | kinds | significance | trend(s) |
| What | Investigate | jobs | roles | importance | consequential | compare |
| When | Compare | purpose | structure | characteristics | project | contrast |
| Where | Uncover | value | lifestyle | relationships | implication | cause |
| Why | Determine | function | defense | adaptations | connection | effect |
| How | Examine | capacity | survival | conditions | correlation | value |
| Which | Study | intent | result | infer | pattern(s) | analyze |
| | Research | | outcome | imply | | |

| | |
|--|---|
| <p>Review your inquiry questions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Stimulates your curiosity <input type="checkbox"/> Encourages you to dig deep for information <input type="checkbox"/> Challenges you to think about your discoveries <input type="checkbox"/> Prompts you to analyze your findings <input type="checkbox"/> Guides your research quest <input type="checkbox"/> Keeps you focused <input type="checkbox"/> Sparks your imagination <input type="checkbox"/> Helps you to make personal meaning | <p>Use one or more of the focus or relationship words in your question(s) to give research power. Brainstorm your question ideas and record your best efforts here.</p> |
|--|---|

"Curiosity is an important factor in the learning process, both as a motivator and a facilitator." Carol Koechlin & Sandi Zwaan

From: Koechlin, C., & Zwaan, S. (2006). *Q tasks : How to empower students to ask questions and care about answers*. Markham, ON: Pembroke Publishers.

Building on background knowledge to formulate researchable questions

Questioning to Learn

Anne R. Diekema

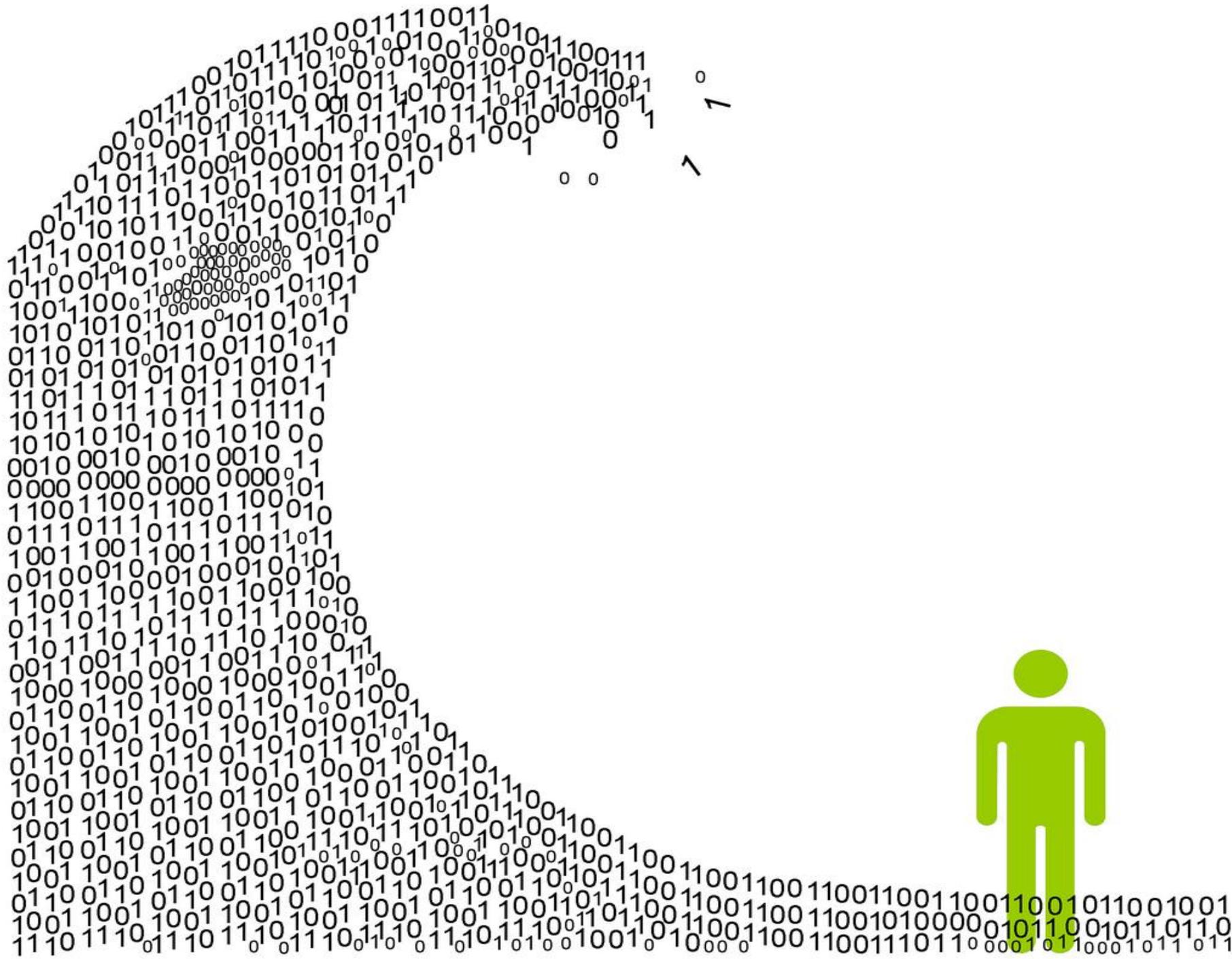
Sheri Haderlie

School Library Media Administration Program

Instructional Technology & Learning Sciences

Utah State University

<http://www.flickr.com/photos/intersectionconsulting/7537238368/sizes//>



Today's context

“Anytime they [students] are **questioning, finding answers, discovering new ideas, and constructing their own meaning** they are drawing upon their skills of inquiry.”

(AASL, 2007, p. 17)



Introduction

UELMA 2013 - Searching to Learn

Student difficulty selecting meaningful topics

Enter Searching to Learn strategy

Builds background knowledge

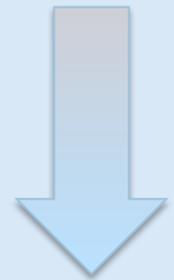
UELMA 2014 (today!) - Questioning to Learn

Moving from background knowledge to great questions

Hands-on session with guided practice exercises

The Student as Questioner

1. Encouraging curiosity
2. Understanding questions
3. Learning to question
4. Questioning to learn



From: Koechlin, C., & Zwaan, S. (2006). *Q tasks : How to empower students to ask questions and care about answers*. Markham, ON: Pembroke Publishers.

1. Encouraging Curiosity

- Harness the power of curiosity as a catalyst for learning
- Rich learning environment: library resources, experts, field trips, etc.
- Asking questions is part of the learning process
- hands-on, minds-on
- Model asking questions



From: Koechlin, C., & Zwaan, S. (2006). *Q tasks : How to empower students to ask questions and care about answers*. Markham, ON: Pembroke Publishers.

Encouraging Curiosity Activity

- Question prompts to encourage curiosity
 - Which subject are you most interested in? What is it about this subject that interests you?
 - Are there certain topics within this subject that holds more interest than others? Which? Why?
 - If you could study/investigate anything you wanted to, what would it be?
 - How does your curiosity about a topic affect how you approach it, how hard you work at it, how much you remember?

2. Understanding Questions

- Purpose affects construction
- **Closed** (1 answer or easy-to-find)
- **Open** (not a simple answer, how or why)
- **On the line** (answers in text)
- **Between the lines** (clues in text)
- **Beyond the lines** (reflective, require making connections between text and related ideas or concepts)



Understanding Questions Activity

- Turn closed questions into open
 - a. When was Ludwig von Beethoven born?
 - b. What does UELMA stand for?
 - c. Where is the next total lunar eclipse best observed?
- Create a closed and open question for your own topic
- Create questions from text on handout
 - a. On the line question
 - b. Between the lines question
 - c. Beyond the lines question





Sharing Open Questions

Understanding Questions Activity

- Turn closed questions into open
 - a. When was Ludwig von Beethoven born?
 - b. What does UELMA stand for?
 - c. Where is the next total lunar eclipse best observed?
- **Create a closed and open question for your own topic**
- Create questions from text on handout
 - a. On the line question
 - b. Between the lines question
 - c. Beyond the lines question





Sharing Topic Questions

Understanding Questions Activity

- Turn closed questions into open
 - a. When was Ludwig von Beethoven born?
 - b. What does UELMA stand for?
 - c. Where is the next total lunar eclipse best observed?
- Create a closed and open question for your own topic
- Create questions from text on handout
 - a. On the line question
 - b. Between the lines question
 - c. Beyond the lines question





Sharing Handout Questions

3. Learning to Question

- A good research question is one that guides the questioner through a quest to build personal meaning and understanding
- Who, what, where, when, why, how?
- KNWL chart
- What keywords and phrases will lead me to information I need?



From: Koechlin, C., & Zwaan, S. (2006). *Q tasks : How to empower students to ask questions and care about answers*. Markham, ON: Pembroke Publishers.

Learning to Question Activity

- **KNoWLedge - KNWL Chart**
 - What do I **K**now?
 - What do I **N**eed to know?
 - **W**here can I find information?
 - What keywords and phrases will **L**ead me to the information I need?

- Fill out the **KNWL** chart about your own topic



Sharing KNWL chart

4. Questioning to Learn

- Presearch before research
 - Can't ask great open ?? without some prior knowledge
 - Searching to learn fosters background knowledge
- Learn how to ask (construct) relevant and appropriate questions
- Apply questioning skills to
sort through information, analyze data,
solve problems, make decisions, take actions,
self-analyze, and set goals



From: Koechlin, C., & Zwaan, S. (2006). *Q tasks : How to empower students to ask questions and care about answers*. Markham, ON: Pembroke Publishers.

Questioning to Learn Examples

What is a hurricane?

Investigate the **kinds** of severe storms and how they are predicted.

Examine the **consequences** of severe storms for families and businesses.

What are the possible **implications** of recent severe storms for building codes and disaster planning?

What are the **similarities** and **differences** between hurricanes and other types of storms?

Is there a **connection** between global warming and severity of recent tropical storms?

What can be done to limit the **impact** of severe storms on people, structures and the environment?

How can we ensure that **effective** evacuation and **survival** plans for coping with future disasters are put in place in all vulnerable locations?

How might we **apply** knowledge of design and environmental conditions to improve urban settlement **patterns**?



Questioning to Learn Activity

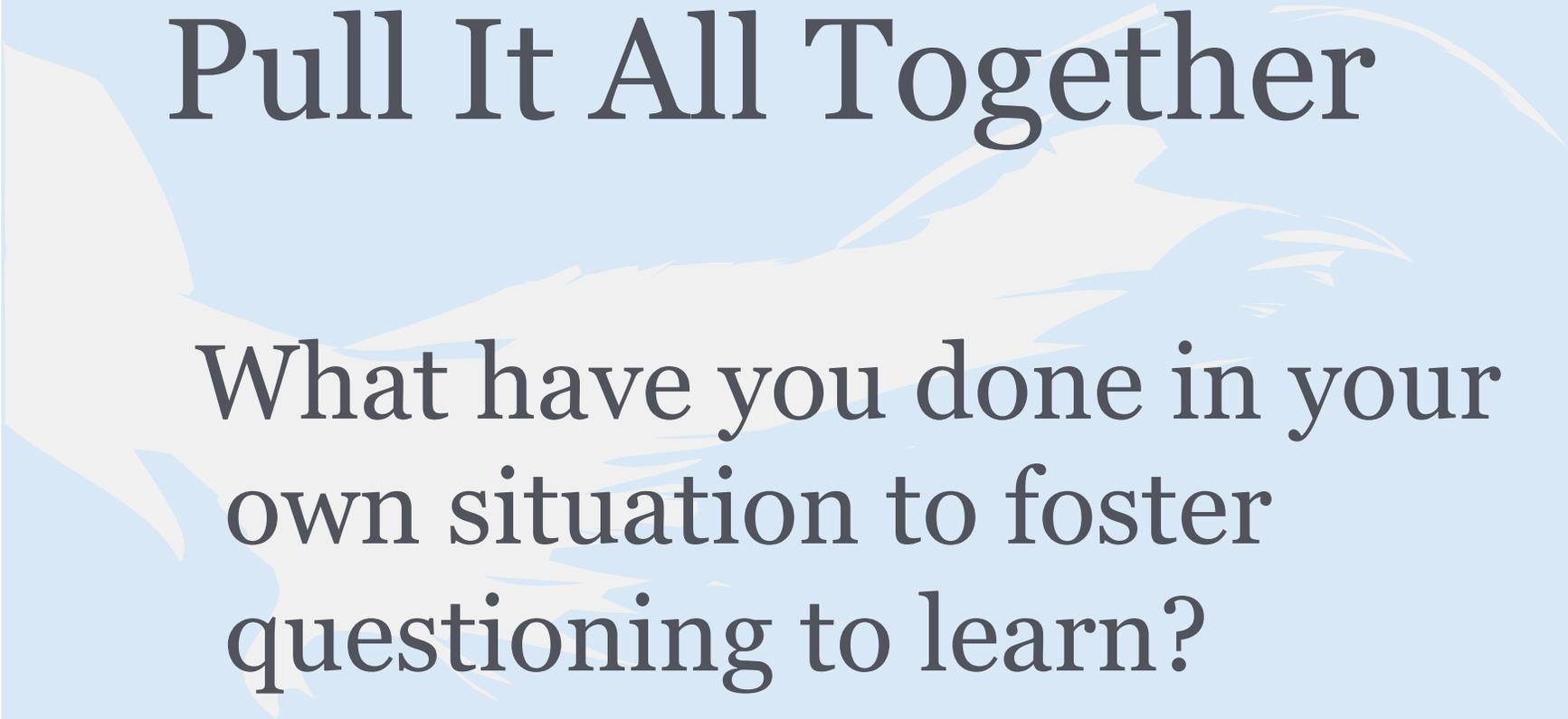
- Use questions from your KNWL chart and “power them up” using the resources on your handout





Sharing Research Questions

Pull It All Together



What have you done in your own situation to foster questioning to learn?

Wrap-up

- What did you learn?
- Will you use questioning to learn in your own classes?
- If so, how?



**Thank you
for coming
& participating**

Further reading

Fontichiaro, K. (2013). Research Strategies Grades 6-8. *School Library Monthly*, 29(4), 51-53

Fontichiaro, K. & Johnson, E. (2013). *Know What To Ask: Forming Great Research Questions*. Ann Arbor, MI: Cherry Lake Publishing.

Koechlin, C., & Zwaan, S. (2006). *Q tasks : How to empower students to ask questions and care about answers*. Markham, ON: Pembroke Publishers.

Diekema, A. & Haderlie, S. (2013) UELMA 2013 conference materials: http://digitalcommons.usu.edu/itls_facpub/253/

Contact Us:

Anne Diekema: anne.diekema@usu.edu

Sheri Haderlie: sheri.haderlie@usu.edu

Presentation materials:

http://digitalcommons.usu.edu/itls_facpub/481/