

The art of asking good questions using the Question Formulation Technique

Glenn Koelling, Adrienne Warner, & Lori Townsend of the University of New Mexico

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Agenda

01

Warm Up

02

Research as inquiry

03

The QFT

04

Elements of the QFT

05

Variations on the QFT

06

Q&A

Glenn Koelling



Lori Townsend



Adrienne Warner




Hello!


Slides URL

<https://tinyurl.com/ECILQFT>

But first . . .

- Your name, institution, & position
 - What is something that you are good at doing?
 - How did you get good at the thing you are good at doing?
- 

A few questions. . .

- How did you learn to ask questions?
 - Are you asked to teach research questions?
 - If you teach research questions, how do you approach it?
- 

Research as inquiry



How we often see the
Research process

Topic selection,
developing
research questions,
& thesis

Finding
sources

Writing/speaking
(including formatting
& citation)

What's missing?



Beginnings are hard
It's a steep start

A landscape photograph featuring a dirt road that stretches from the bottom center towards the horizon. The road is flanked by dry, golden-brown grass and shrubs. In the distance, there are rolling hills and a prominent, flat-topped mountain on the left. The sky is filled with dramatic, dark blue and grey clouds, suggesting an overcast or stormy day. The overall mood is contemplative and mysterious.

What's over that rise?
Curiosity is motivating

But curiosity feels risky
*Why not pick something boring
but safe?*



Multiple paths are available
And choosing is hard





Choosing is hard
When you are just getting started



It can be circular & recursive
but you are making progress

Let's try moving from this
Research process

Topic selection,
developing
research questions,
& thesis

Finding
sources

Writing/speaking
(including formatting
& citation)

To this...

Research process

Inquiry with curiosity & exploration (topic selection, developing research questions, developing thesis)

Learning about (finding, reading, and citing information sources)

Communicating (note-taking, reflecting on and recording process, writing/speaking in genre)



Research is
learning

And we rarely learn in a
straight line



Transferable skills



Support curiosity and
inquiry with the QFT
While mitigating risk

The Question Formulation Technique



03

An aerial photograph of a vast colony of birds, likely terns, on a sandy beach. The birds are densely packed, covering most of the visible ground. In the upper center, there is a small, triangular inset showing a closer view of the birds near the water's edge. A white double-quote icon is positioned at the top center of the page, above the main text.

“

First

- Watch the [video](#).
- Pay attention to anything that sparks your curiosity or raises a question for you.

Next

- Write down as many questions as you can, going for quantity over quality. Aim for 10 questions.

Then



- With a partner, sort your questions into **open** and **closed** questions.
- Pick out your top three questions (& prepare to share one).

Review

Closed-ended questions

- Can usually be answered with “yes” or “no”, or
- a short, specific piece of information, or
- a Google search
- Leave little room for your interpretation and analysis.

Open-ended questions

- There may not be a clear consensus on the answer.
- Usually require more investigation of multiple sources, plus your analysis.
- Require lengthier responses.

Then



- With a partner, sort your questions into **open** and **closed** questions.
- Pick out your top three questions (& prepare to share one).

Next

- Rewatch the video.
- In pairs, ask even more questions, knowing what you now know
- Prepare to ask one more.

Major elements of the QFT

Something to ask questions about

A video, a snippet of text, an
image, their own topic

Generation of questions

Quantity over quality

Sort into open and close-ended questions

With guidance

Choose the best questions

On their own or with partners

Glenn's Adaptations



05a



Choose one or two of your questions and add them to this page using the sticky note tool

<--



What has been destroyed or changed by climate change?

What bird species are part of this eco system?

What type of fish are in the water?

Why are the bears of Katmai so popular?

What type of bear?

Are the bears being affected by climate change?

Is their food source (salmon) being affected?

Who recorded this video and uploaded it to YouTube?

What does the aggressive behavior signify or communicate for the bears?

What external processes affect grizzlies' habitat or food supply?

What differences occur in animal sanctuaries, zoos, protected parks, in the "wild"?

is this by the coast?
is this in North America? What season or month? What type of fish are they trying to capture?

Is this typical bear behavior?

What is the temperature of the water?

The video title has a number (I think 856?) and "mating and fighting." What is the number? An ID for a bear? A location?

What laws are in place to protect the animals/ environment?

Who recorded the video?



Michael Steck Letters 1

Michael Steck

Courtship letter from Michael Steck to Elizabeth Wood. Link to item in Center for Southwest Research: [MSS 134 BC Box 4 Folder 3 & 5](#)



Michael Steck Letters 2

Elizabeth Wood

Courtship letter from Elizabeth Wood to Michael Steck. Link to item in Center for Southwest Research: [MSS 134 BC Box 4 Folder 4 & 5](#)



Waldo H. Rogers Letters 1

William Rogers

Apology letter from jailed William Rogers to his cousins/victims Albert & Helen. Link to item in Center for Southwest Research: [MSS 214 BC Box 8 Bundle 18](#)



Waldo H. Rogers Letters 2

William Rogers

Two letters from William Rogers to his parents expressing his anguish at his situation. Link to item in Center for Southwest Research: [MSS 214 BC Box 8 Bundle 18](#)

Letters from UNM archive

Glenn's video



Lori's Adaptation



05b



“The Yurok tribe is reversing centuries of ecological damage to their land and making it more resilient to climate change by marrying two systems that might seem contradictory: indigenous land management practices and modern Western economics.

In this episode we talk to Yurok Tribe Vice-Chairman Frankie Myers about how the Tribe recovered stolen land with the help of a carbon offset program, the creative ways they're bringing the salmon back, and the role beavers play in the ecosystem.”

Source: How to Save a Planet Podcast

<https://gimletmedia.com/shows/howtosaveplanet/5whko6o/the-tribe-thats-moving-earth-and-water>

Answering the basics

- WHO (Population): Yurok Tribe, indigenous peoples, Native American
- WHERE (Setting): reservation, tribal lands, forest, river
- WHERE (Location): United States, California, Klamath River
- WHEN: Recent
- WHAT: land management, carbon offset program, salmon, beavers, forests, fire

Questions for further investigation

- What are the approaches to land management being taken by the Yurok tribe in the Klamath watershed?
- Do these approaches exemplify indigenous land management more broadly?
- How do these approaches differ from Western approaches to land management?

Keywords and searching

- Land management, forestry, land use
- Indigenous, Native American
- Yurok, Klamath

**Follow the
evidence**



Revised questions

- How have indigenous women been involved in traditional forestry and current activism around forestry?
- How can I understand indigenous forestry through indigenous feminism?
- How have these approaches been shown to improve outcomes for both the health of the land/ecosystem and the economics of the tribe?

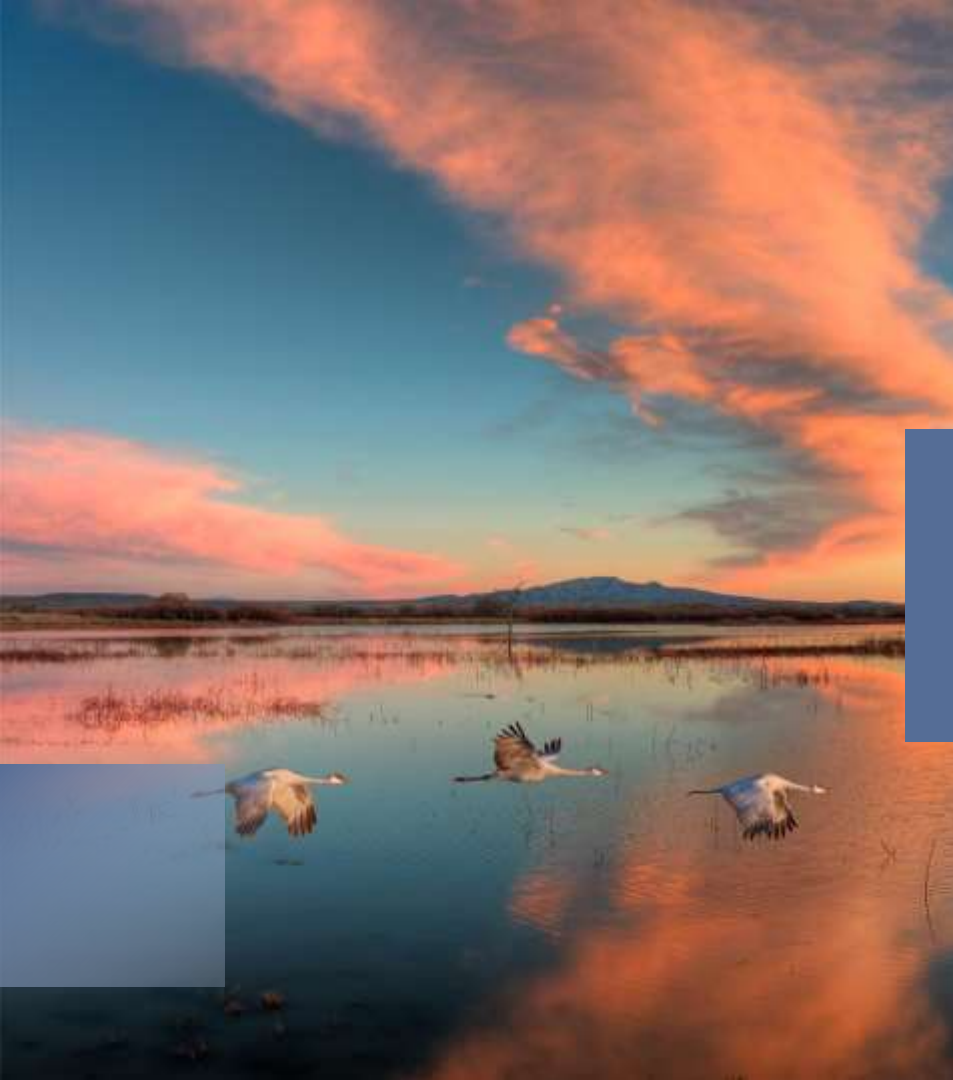
Revised keywords

- Indigenous, Native American, American Indian
- ecological knowledge, forestry, forest management
- Women, feminist/m
- Activism



Adrienne's Adaptation

05C



Extended Workshop
Advanced Undergraduates



What the research question
does.

Worksheet - in class or homework

Question Formulation Technique

McNair/ROP Workshop with UNM Librarians

November 2022


Adrienne Warner, adrienne@unm.edu

This activity gives you a chance to apply the library and research skills you've learned to your own project. It is also intended to be a technique you can apply to future course assignments in order to transform everyday questions into potential research questions.

Step 1. Identify the broad topic you've been assigned or are working on:

Step 2. Write down every question you can think of about this topic. Don't worry about question quality or demonstrating your knowledge. The point here is to go for quantity and curiosity. Aim for 10 questions. Note: if you get

Before we go...

- How could you adapt this for your context?
What audience do you think this would work best for?
 - What prompt would you be excited to share with students?
- 

Readings

- Deitering, A.-M., & Rempel, H. G. (2017). Sparking Curiosity – Librarians’ Role in Encouraging Exploration –. In the Library with the Lead Pipe.
<https://www.inthelibrarywiththeleadpipe.org/2017/sparking-curiosity/>
- Field-Rothschild, K. (2018). Chapter 7: Research as Inquiry: Teaching Questioning in FYC for Research Skills Transfer. In *Teaching Information Literacy and Writing Studies : Volume 1, First-Year Composition Course*, ed. Veach, G. West Lafayette: Purdue University Press.
- Hofer, A. R., Lin Hanick, S., & Townsend, L. (2019). Research Process. In *Transforming information literacy instruction: Threshold concepts in theory and practice* (pp. xiv, 255 pages :). Santa Barbara, CA: Libraries Unlimited.
- Scharf, D., & Dera, J. (2021). Question formulation for information literacy: Theory and practice. *The Journal of Academic Librarianship*, 47(4), 102365.

Resources

- Handout examples from Adrienne & Glenn
- Right Question Institute: <https://rightquestion.org/what-is-the-qft/>

Questions?

<https://tinyurl.com/ECILQFT>



- Photo of curious dog by Chris Arthur-Collins on Unsplash. <https://unsplash.com/photos/qGkVJ7Tx36s>
- Photo of paper question marks by Olya Kobruseva from Pexels <https://www.pexels.com/photo/question-marks-on-paper-crafts-5428833/>
- Child at foot of stairs Photo by [Jukan Tateisi](#) on Unsplash https://unsplash.com/photos/bJhT_8nbUAO
- Photo of path by three sisters by Lori
- Photos of Otis and Rosie by Lori
- Photo of tightrope walker by [Loic Leray](#) on [Unsplash](#)
- Photo of path and person walking by three sisters by Lori
- Photo of edwing murmuration by linda hall on Flickr <https://www.flickr.com/photos/hallright/37783722575/>
- Video of Bosque del Apache by John Fowler on Flickr <https://flic.kr/p/2ckKhC1>
- Photo of Sandhill cranes in flight at sunset by Diana Robinson on Flickr <https://flic.kr/p/DFTdd1>
- Photo of Sunrise over Bosque Del Apache by sarowen on Flickr <https://flic.kr/p/9rPPRM>
- Photo of 3 cranes at pink sunset by John Fowler on Flickr <https://www.flickr.com/photos/snowpeak/4152675183/>
- Photo of spiral staircase by Suvan Chowdhury from Pexels <https://www.pexels.com/photo/low-angle-photo-of-spiral-stairs-1734993/>

Photo credits (cont.)

- Transplant tiny plant Photo by Jael Rodriguez on Unsplash
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- Person bouldering Photo by Mark McGregor on Unsplash
<https://unsplash.com/photos/Ns8trMR4Om8>
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<https://unsplash.com/photos/AoqqGAqrLpU>
- Faucet parts Photo by Alexander Andrews on Unsplash
<https://unsplash.com/photos/NOYrpVDBeww>
- Children with party favors by Nancy C Wood:
<https://nmdc.unm.edu/digital/collection/NWood/id/258>
- Puzzle pieces Photo by Gabriel Crismariu on Unsplash
<https://unsplash.com/photos/sOK9NjLArCw>
- Sunset at Bosque del Apache by John Fowler at
<https://www.flickr.com/photos/snowpeak/4152675183/>
- Ancient stone arch and keystone in the sky photo by isabella66 on Adobe Stock

- Photo of small plant on rock by Nagara Oyodo on Unsplash <https://unsplash.com/photos/kEOo9syjDZQ>
- Who's been using my phone? Photo by Chris Isherwood on Flickr. <https://flic.kr/p/bwNdRP>
- Baseball game at Heart Mountain <http://digitalcollections.archives.csudh.edu/digital/collection/p16855coll4/id/44870/rec/1>
- Early visitors at Handkerchief Pool in Black Sand Basin https://www.nps.gov/features/yell/slidefile/history/1919_1945/visitoractivities/Images/03020.jpg
- Owney the dog https://www.si.edu/object/owney-dog:npm_0.052985.274.1
- Buffalo Soldiers at a meal <https://nmdc.unm.edu/digital/collection/Bufalo/id/10>

Photo credits (cont.)