Asking and Evaluating Relevant and Focused Research Questions

Module 4, Engaging in Inquiry

Starting Research off Right—Turning Topics into Questions

Module 3 led you through some exploratory research using pre-designed questions; Module 4 will now move us from thinking generally about topics to how to form questions of your own. To do this, we first take a broad topic and then let the initial research findings shape our questions as we "zero in" on the "target":

> Ask open-ended questions (think "how" and "why")

> Consider the value—"so what?" (why does this topic matter to you? To others?)

> Then, prioritize a few to explore further and evaluate

  o What aspect of the general topic will you explore?

  o Is the question clear? Focused? Complex?

  o Hypothesize about the path you might take to an answer (which sources? Which primary kind of

     material? Which methods of inquiry?)

Resource--The Q-Matrix

	Event What…	Situation Where… When…	Alternatives Which...	People Who…	Reasons Why…	Means How…
Present …is…						
Past …did/was…						
Possibility …can…						
Probability …would…						
Prediction …will…						
Imagination …might…						
Responsibility …should…						

Process for Question Formulation

⭐ Pick a topic, do some preliminary research

⭐ Write down as many questions as you can that relate to a topic (no questions are 'dumb' questions… they help lead us to others)

⭐ To improve, make sure the questions you prioritize:
- ✓ are open-ended
- ✓ require a judgment (argumentative)
- ✓ are researchable (there is material related to the question available, and it's credible and considerate)
- ✓ involve ongoing debates
- ✓ contain a variety of valuable, different perspectives (what two—or-more-sides exist on the issue?)
- ✓ limited to single questions
- ✓ within the proper scope of the assignment

⭐ Rank the questions based on interest, relevance, and researchability

⭐ Do a little more preliminary research to narrow the selection

⭐ Select and begin "capital R" Research

Some Examples

Unclear Question

Why are social networking sites harmful?

↓

More Clear

How are online users experiencing or addressing privacy issues on social media sites like Facebook and Twitter?

Too Simple

How are doctors addressing diabetes in the United States?

↓

More Complex

Based on the common traits of those who have Type II Diabetes in the US, how can these commonalities be used to effectively aid the medical community in establishing routine preventative measures?

Unfocused

What is the effect of global warming on our climate?

↓

More Focused

How has glacial melting affected the mating processes of specific species of Penguins in Antarctica over the last two decades?

Setting a Good Question Framework

Considering Scope, Delimitation

SCOPE

Scope considers the boundaries set for the research project—including the kind of research, the theoretical focus and approach, and what considerations were made in setting limitations for what can be covered in the size and type of project. (For Task 1, the scope set by The College Board is a 1200-word report, and for Task 2, a 2000-word literature-based argument)

DELIMITATION

Delimitation is set by the research explicitly and acknowledges all areas of the research project that are purposefully excluded for the sake of narrowing focus—includes things like isolating to certain variables (to the exclusion of others), to certain time frames, to certain populations, types of participants, relevant perspectives, etc. (with the goal of making the research timely, meaningful, and actionable)

Narrowing and Focusing

Choosing Lenses and Perspectives

Lenses: overarching ways of knowing (filters for knowledge based on a particular epistemic approach or methods of inquiry by discipline)

Perspectives: positions taken on the topic within the lenses and studies

*Lenses are not perspectives, and perspectives are not lenses—these are often improperly conflated terms but actually signify different parts of the process and warrant distinction

The College Board's Suggested Lenses

Cultural/Social	Artistic/Philosophical	Ethical
Explores how daily issues impact lives, relationships, customs, beliefs, etc.	Explores how artworks express ideas about an issue and/or what philosophers think at a meta-level.	Explores issues at a moral level and considers things such as laws, human rights, consequences of actions, effects, etc.
Political/Historical	**Environmental/Scientific**	**Economic**
Explores effects of an issue on government decisions, considers contextual background or causal relationship of events in relation to the issue.	Explores contextual effects of an issue on the social and ecological environment; uses data from the biological, chemical, and physical level.	Explores the financial impact of issue and role in possible solutions on both personal and communal level.

An Example

Cultural/Social	**Artistic/Philosophical**	**Ethical**
What kinds of product designs are best for the environment while also appealing to consumer needs?	In what way does 'work' alienate us from personal identity? How is 'work' utilized as a tool for suppression in 1984?	What working hours are optimal for efficient output while also affording people time to develop individual mental health practices?
Political/Historical	**Environmental/Scientific**	**Economic**
How have Capitalistic models of work played into the political division of today?	How can AI technology be utilized today to mitigate some of the human folly in certain industrial designs?	What is the economic impact of allowing workers to work from home at least some of the time?

A Good Template to Structure Your Research Question

⭐ Ask yourself the 'so what?' if answer is 'I don't know' or 'don't care,' scrap it for a new question/topic

⭐ Frame question in statements

- "I am trying to learn about _____"

- …"because I want to find out _____"

- …"in order to help my reader understand _____."

Narrowing and Focusing

Also, Acknowledging Stakeholders

Lenses help us focus the issue on a particular pattern of inquiry. Perspectives reflect the specific viewpoints being acknowledged on an issue. Recognizing the person(s) or group(s) with interest or concern in the topic of inquiry is to recognize the *stakeholders* whose voices *matter* on the issue. This also helps provide not only another means for focusing and narrowing a good research topic but also provides you the timeliness and relevance.

An Example

Topic = the rise of digital currencies

Lenses = Economic (economic implications of digital currency)

Stakeholders = consumers, independent companies (think Venmo, Paypal, Zelle, etc.), banking industry

Perspectives = consumers' ease and privacy using digital currencies; consumers' concerns about volatility of value; banking's concerns about competition to traditional market; banking's attempt to draw from the innovation (integration of digital currency, acquisition of alternative payment companies, methods)

Guided Practice, Sample Question Evaluation

Reminder—things to consider when evaluating a question:

> Does the question require a judgment or evaluation to be made?
> Is it researchable? (not too broad, narrow, or lacking in feasibility)
> Does it involve genuine points of ongoing debate?
> Does it invite engagement with alternative perspectives?
> Is it simple? (does it avoid embedded questions?)

[for teachers: may use slide while students work through Module 4.2 Practice Research Evaluation]