

Exercise 12

Create a Concept Map

Most people do not think in a linear style when they are working creatively. We think by linking groups of ideas together, "webbing" or "linking" a path to the final subject and topic idea. You will be joining all that you already know with what you learn during your research to build a more complete landscape of the topic you are working on.

Concept mapping helps you create a visual design, picture, or diagram of the thinking you are engaged in so you can reflect, sort, and refocus the ideas easily. Use this concept-mapping exercise to allow your brain to "free-think" along the way to the development of a research question.

Phase I: Brainstorming Instructions

In the center of the newsprint sheet, write down the most important word, short phrase, or symbol that relates to the subject idea you want to research. Draw a circle around this main idea.

Take a minute or two and think about what you put down on the paper. Thinking freely, without any expectation of the result, write or mark any and all related words, concepts, or symbols outside the circle. Write anything you can think of that is even remotely related to the topic idea. Come up with at least four subtopics that relate to your main idea. For

each of your four subtopics, think of three to four subdivisions that fall under the subtopics. Now draw squares around single ideas and circles around groups of ideas.

Use lines to connect these items to the main idea and to groups of related ideas.

Use arrows to interconnect ideas or to form subgroups of ideas.

Leave lots of white space so your concept map has room to grow and develop.

Don't worry about being exact or perfect—don't analyze the work!

Phase II: Editing or Refocusing

Think about the relationship of "outside-the-circle" items to the center item.

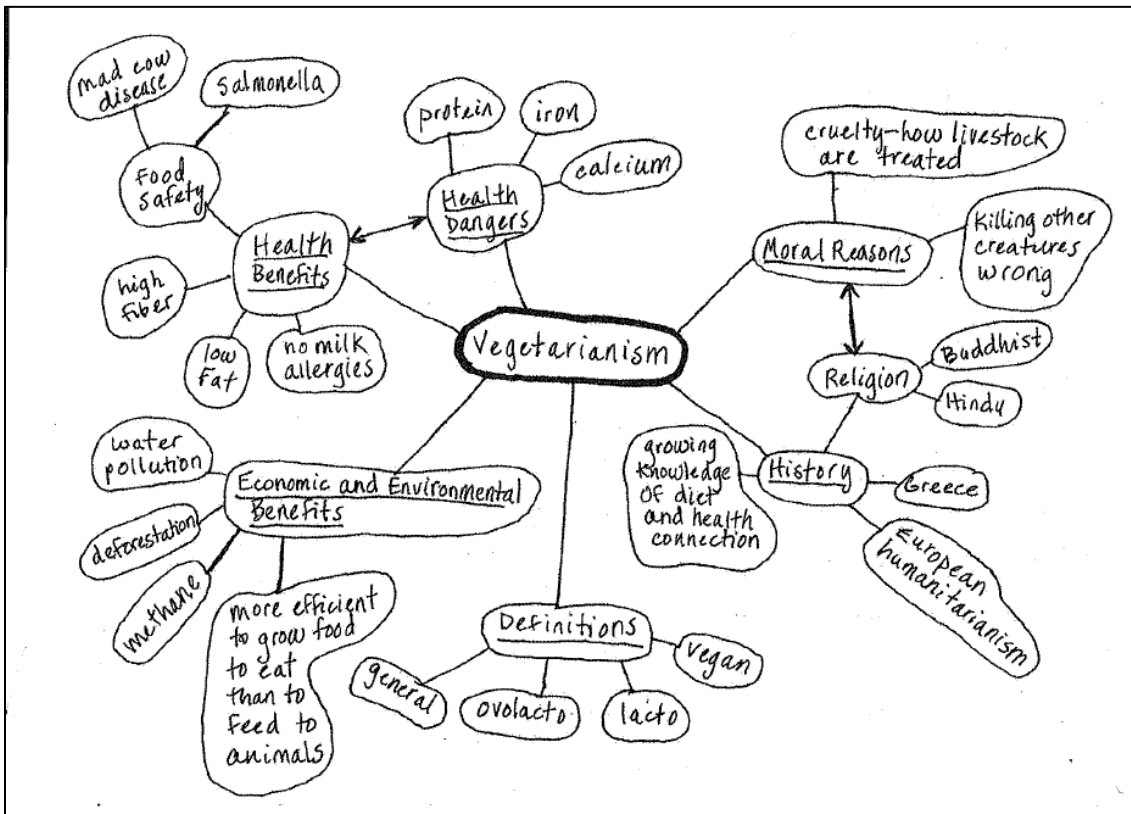
Erase and replace or shorten words to some key ideas.

Relocate important items closer to each other for better organization.

Link symbols with words to clarify relationships.

What are you thinking about now? How is your topic developing?

Now proceed to topic analysis to further develop your research question!



Exercise 14

Creating a Research Question

The table below illustrates how a research question develops from a broad topic to a focused question. Follow the four examples down the columns to see how the questions develop. Then use the blank form provided below to develop your own research question.

BROAD TOPIC	RESTRICTED TOPIC	NARROWED TOPIC	RESEARCH QUESTION
Pollution	Acid rain	Acid rain in the United States	What can the United States do to prevent acid rain?
Fishing	Commercial fishing	Fishing regulations and New England	What impact do fishing regulations have on commercial fishing in New England?
Censorship	Internet	Internet and China	How will China's effort to censor the Internet affect its citizens?
Nutrition	Diets	Vegetarianism	What nutritional benefits are there to vegetarianism?

Now try out your topic idea below. It is useful to work out several variations of the topic idea to see how it could change slightly and be improved or amended.

BROAD TOPIC	RESTRICTED TOPIC	NARROWED TOPIC	RESEARCH QUESTION

What type of question did you design?

- Comparison
- Cause and effect
- Measuring
- Process

Check to be sure that the research question meets these criteria:

- It is open-ended (cannot be answered with simple yes or no).
- It addresses an issue or controversy and/or solves a problem.
- It is something that you can take a stand on.