

UNIVERSITY *of* VIRGINIA LIBRARY

CHARLES L. BROWN SCIENCE & ENGINEERING LIBRARY

<http://www.lib.virginia.edu/brown/>

STS 101

Framing a Research Question Example

Framing a Research Question

Most of the papers you will write as a student at UVA—and many of the reports and documents you will produce for employers and others once you graduate—will need to go far beyond a simple retelling of facts and figures. It's not enough to use the "Summer Vacation Report" style of writing: I came, I saw, I bought souvenirs, I went home. Instead, you need to look at your question from various angles, analyze the relationships among its parts, document your points with reliable, verified facts and figures, illustrate key parts with appropriate graphics, and try to get at some of the reasons behind the facts.

One way you could conduct this process might be to use a "Journalistic" approach. For each aspect of your topic ask yourself those tried-and-true questions that all good journalists learn early in their careers: who, what, when, where, how and why? Here's an example. The suggested questions are certainly not all that could be asked—the specific questions you ask will vary with your topic. And not all the categories shown may be appropriate for a given paper, or some categories may require more emphasis than others for a given paper. Much depends on the needs/requirements of your instructor or other person for whom you are writing and on the type of presentation and the thesis you are trying to prove or disprove. In the end YOU must use your own best judgment and analytical skills in determining how best to research and organize your paper and what questions best get at the points you are trying to make in it.

TOPIC: The invention and use of the pop-top aluminum can.

THESIS: The introduction of the pop-top aluminum can changed the beer and soft drink consumption habits of consumers, affected consumer health and safety, altered the nature of the container industry (especially for beverages) and affected the quality of the environment in various ways.

WHO:

- Who invented the pop-top can?
- What company or companies did they work for? Did those companies have any vested or hidden interests in developing the pop-top can?

WHAT:

- What led can manufacturers to go from steel or glass to aluminum? What economic factors may've influenced the decision to switch? What social factors?
- What was the effect on the food/beverage industry of the pop-top can? Did production of beer and soft drinks rise or fall as a result? What statistical sources support or illustrate these trends? Were any of the changes due to something other than a change in packaging (e.g. rise or fall in population or changes in population demographics)? What statistical sources support or refute these data?
- What was the effect of the pop-top can on consumer behavior?
- What effect did the aluminum pop-top can have on materials recycling? On the environment? On social behavior? On marketing and advertising?

WHEN:

- When was the pop-top aluminum can invented/patented? Why then as opposed to any other particular time? What was happening in related industries (food service, leisure and tourism, transportation) that may've influenced when pop-top cans were introduced? How?
- When was the pop-top aluminum can first introduced, as opposed to being invented and/or patented? Was there a delay between invention and first use? If so, why? And what eventually tipped the balance?
- When was aluminum first used as a container in any form? Why then and not earlier or later? What social or economic factors influenced the use of aluminum as a packaging material? How did consumers react to aluminum as a packaging material? Why?
- When was the attached pop-top introduced, as opposed to the detachable top? Why?

WHERE:

- Where around the world is the pop-top can used? Are there places it's used more extensively than other places? Why? Are there cultural or economic reasons for the differences in use?
- Where does America get most of its aluminum (or the bauxite ore from which it's made)? What effect does this have on aluminum can manufacture?

HOW:

- How did the introduction of the pop-top can change the behavior of consumers (if it did)?
- How are the cans manufactured? What effects does this process have on society (if any)? [HINTS: electricity consumption, water consumption, environmental concerns, health and safety concerns, economic concerns, etc.]

WHY:

- Why should we be concerned about the proliferation of pop-top cans? Or should we be?
- Why did consumers readily adopt the use of pop-top cans?
- Why isn't aluminum currently used for all kinds of cans?
- Why should we worry (or should we) about the supply of bauxite and/or aluminum production?
- Why should we be concerned (or should we be) about workers in all facets of the aluminum industry?
- Why should we be concerned (or should we be) about aluminum in our food and water supplies? Does the prevalence of aluminum cans affect these concerns? How?