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# The “Factsheet” as a Tool for Teaching Logical Writing

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## Introduction

One of the major writing deficiencies of many students entering college is the inability to construct a well-supported, logically-reasoned essay—on any subject. Students who are able to write poetry, personal opinions, and even stories often cannot write a solid essay. More important, most are unaware of this deficiency, believing that a recitation of mere opinion and belief constitutes an essay.

Beyond grammatical skills, writing a college-level essay requires: (1) a thesis; (2) factual support; and (3) clear lines of logic to link the factual support into arguments either supporting or refuting the thesis. Regardless of the topic, from meteorology to history, from elementary education to business, any effective essay will require these elements.

Unfortunately, while most students have strong opinions, few have learned these basic skills, and fewer still have had any chance to practice them. Learning such skills requires that students write essays of at least several hundred words on a repeated basis, and in most secondary schools essay writing occurs sporadically, if at all, excepting the obligatory term paper.

## Rationale for the "Factsheet"

The "Factsheet" approach was developed to teach the organization and structuring of facts in a logical fashion. In writing term papers, research papers, and even essay tests, most students focus primarily upon finding and regurgitating facts, rather than upon analyzing, structuring, and presenting those facts.

By actually providing facts, as illustrated in the sample, the instructor can focus the exercise on the process of logical writing, not on finding or remembering the factual components. In addition, a provocative thesis is employed to reinforce the point that the facts must be applied to support or refute *something*. Facts, by themselves, prove nothing. They must be applied to a situation, a belief, or a theory.

Use of factsheets does not help students in learning how to research, nor is it primarily targeted at improving basic grammar. It is a bridge between the objective test/SAT approach and open-ended written presentations required in college and especially after undergraduate work. In higher-level courses and in professional fields, individuals must synthesize and organize large amounts of knowledge, not just a page of "facts." Without understanding and practicing the process, such written organization can be difficult indeed.

Although developing such factsheets requires additional time on the part of the instructor, the factsheets provide writing exercises through which students can concentrate on the logical components of the writing process—choosing appropriate facts, analyzing them, and developing clear arguments based on such facts.

## Structure of the Factsheet

As illustrated in the sample, each factsheet consists of two sections:

(1) A short introduction/thesis paragraph, and (2) a list of factual statements or statistics all *apparently* relevant to the thesis. The students

must pick from among the facts, although they may add any additional material which is relevant, and use such facts in a logical manner to support or oppose the thesis.

Thus, students must read and understand the facts, analyze them to determine which are useful to the positions they wish to take, and organize a logical argument based on such facts.

In order to clarify the exercise, I have added two additional requirements: (1) the student must reach a final conclusion either supporting or opposing the thesis, and (2) generalizations unsupported by facts are unacceptable.

### **Drawbacks**

Using factsheets can create problems, especially if the instructor does not clearly outline the rationale for their use, particularly since a large percentage of students appear unaccustomed to proving their opinions or conclusions, let alone in a logical or rigorously supported fashion.

No matter how detailed the explanation of the factsheet, some students will find it difficult to grasp the concept that the *process* is more important than a "right" answer. Likewise, the instructor who employs factsheets must understand that the results must be evaluated on how well students develop and write logical essays based on their analysis of the facts, not on whether such results agree with the instructor's preconceived structure.

Some students will quibble with the selection of "facts" or the wording of the thesis, perhaps because the facts presented or the thesis does not match their opinions. I define "quibbling" as raising arguments against either the selection of the facts or the construction of a thesis. Quibbling, I have found, tends to come from brighter students who would prefer to avoid the concentration involved in analyzing and using

facts, and thus apply their brilliance to semantics. Since any number of provocative theses may be subject to semantic flaws, and since quibbling defeats the basic purpose of the exercise, I discourage semantically-based arguments. At the same time, I tend to reward students who can use the facts to refute the thesis, or who can develop arguments based on other factual or logical grounds.

Some students will also avoid analysis by simply picking facts and merely stringing them together, calling the result an essay. To avoid this, the instructor has to make clear that mere repetition is not writing, that the student must add thought and analysis to each fact.

The biggest drawback from an instructor's perspective is the need for continuity. One cannot merely present a factsheet or two, claim that this will help the students improve their logic, and then go on to the "serious" business of the course. Because students, like all members of society, expect their work and word to be taken on faith, the idea of being evaluated on how they reach their conclusions is both unfamiliar and strongly resisted. Repeated use of the factsheet or a similar process is necessary to emphasize the need for analysis and logical support.

### **Possible Adaptations**

Whether the factsheet approach is adaptable to a specific discipline or course of study depends on whether such a course requires an understanding of *process* as opposed to factual recall. For purposes of my own composition courses, I define process as the combination of developing a logical line or argument which either supports, refutes, or modifies a thesis; analyzing facts, anecdotes, or relationships to determine how to support or refute the thesis; and developing a written argument embodying the analysis, arguments, and factual/anecdotal support.

While factsheets might well have limited value in pure mathematics courses, where the relationships and processes are expressed in math-

ematical notation, generally factsheets could be used as a teaching device in courses where student understanding of relationships and processes is necessary. A brief listing of historical events within a limited time period could support a range of theses. Similar approaches would seem feasible in economics, political science, business, and education courses.

One cannot use factsheets effectively, however, if the goal, stated or otherwise, of the course is to have students memorize key facts, theorems, dates, and names.

In some respects, an open-book examination is an extension or adaptation of the factsheet concept, since the facts are available to any student familiar enough with the text, and the point of such an examination is presumably more than the use of a text as a dictionary.

## **Conclusion**

The factsheet approach to writing can help develop greater student skills in use of facts and supporting logic, as well as reinforce the concept that education and learning require an understanding of process, and more than simple "right" answers.

## **SAMPLE FACTSHEET**

### **Recreation in the United States**

**Thesis:**

People in the United States only think they are getting good exercise. In reality, they waste billions of dollars when walking, chopping wood, doing gardening and housework would provide better health at lower cost. The exercise game is nothing more than expensive escapism.

**Facts:**

45% of the \$35 billion spent annually on exercise and recreational goods by Americans goes for recreational vehicles, such as boats, snowmobiles, RVs, and bicycles.

Sales of bicycles—the only human powered vehicle—comprise less than 8% of the \$35 billion, although the average bicycle retails for around \$150.

15% of recreation/exercise expenditures go for sport clothing, and another 10% goes for athletic footwear, including golf shoes, jogging shoes, sneakers, and gym shoes.

More than 35% of the \$10 billion spent annually on athletic equipment goes toward firearms, golfing, and fishing equipment. More active sports, such as tennis, get less than 5% of equipment spending dollars.

More than 68 million Americans bowl, but less than 20 million play tennis, and with 14 million pleasure boats owned in the U.S., boating captures more participants than tennis also.

The number of Americans playing active sports has declined. Tennis players have dropped from 25 million to less than 20 million. Even bowling participants have dropped from 72 million to 68 million over the past 5 years.