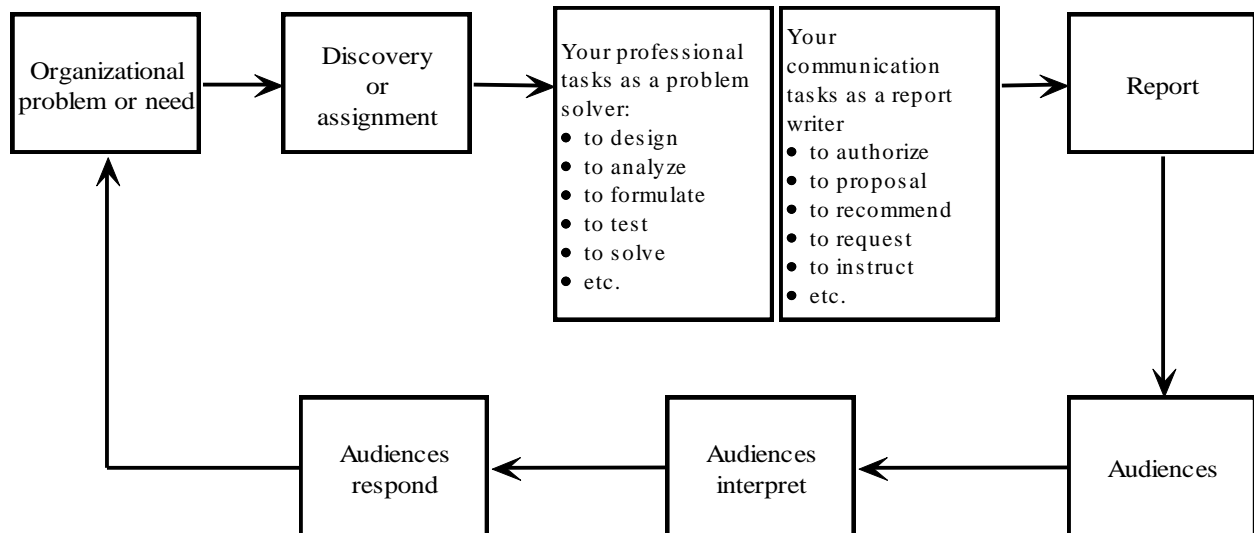


TCO 341
Purpose Statement Heuristic
(Fact A; however, Fact B)



The purpose statement heuristic has three parts:

1. A statement of the problem
2. Your role in solving the problem
3. The communication purpose of the document.

1. Statement of the Problem

In your role as technical professionals, you will often be called upon to solve problems for your company. Typically, organizational problems are ill defined, often not fully understood, much less resolved. Therefore, the first step in solving the problem is clearly defining it.

A problem is a conflict of perceptions between an organizational goal or value and the actual state of affairs. A simple heuristic for teasing out the conflict that is causing the problem is a Fact A; however, Fact B statement.

A is a fact (represents ideal state); **however, B (which conflicts) is a fact** (represents actual state).

For example,

(Fact A) We made a decision based upon an estimate given to us by a contractor. However, (Fact B) the contractor has now given us a revised estimate that is 600% over the original, and we are still expected to pay the bill.

(Fact A) We must follow the new UL specification. However, (Fact B) if we follow the new specification, we will create a potential safety problems for users of our instruments.

(Fact A) The Shipping Department expected Warehouse C203 to be renovated by the date on which Martin Tool and die shipped the Q-body dash. However, (Fact B) Spencer Construction will not have completed the job before the templates arrive.

Formulation of a purpose statement is an important cognitive and communication act, both for you and the audience. If you don't know what the problem is, how will your reader?

2. Your Role

The second part of the purpose statement is to identify your professional role in the organization and what activities you conducted to solve the problem. Use the active voice to state the purpose or objective of your investigation.

For example,

I was asked by Bob Smith to evaluate alternative methods of constructing the wing spars.

Manufacturing was asked to determine whether this was a part failure or an operator failure.

Specifically, the industrial engineering team investigated three questions.

We have completed the Quality Assurance Audit in accordance with your specifications.

3. Communication Purpose

The communication purpose states what you want your readers to do or know once they have read your report. Use a verb that represents the action required by the reader. Verbs that indicate information is contained in the report include describe, explain, inform, illustrate, review, authorize, define, and summarize. Verbs that are used to convince the reader of a particular action include assess, request, propose, recommend, forecast, and evaluate.

For example,

This report presents my recommendations for constructing wing spars using tubular steel.

This memo requests your authorization of overtime pay for the maintenance crew.

I recommend we hire an additional electrical engineer to redoodle the frabis.

This memo summarizes the modifications to the tooling crib.

Homework Exercises

Summarize the problem in the following situations by creating *A but B* statements. Be prepared to discuss your answers in class.*

1. A student who desires part time work to make money for living expenses considers whether to open her own home-based pet care service. Although she has a tight schedule already, she needs the extra money.
2. The new owners of a feed yard need to organize as a business for legal and tax purposes. The options include a general partnership, S corporation, and C corporation.
3. A student in mechanical engineering must choose a design project for a senior class. He considers a diver propulsion vehicle that is quite complex and expensive to assemble.
4. The desuperheater at Acme, Inc., produces steam to heat the seven buildings at the Acme plant. High-temperature, high-pressure steam exits the refrigeration cycle's steam turbine at the plant and enters the desuperheater, where water is added to the steam to drop the temperature and pressure of the steam. The large drop in pressure and temperature produces energy, which is currently wasted.
5. Livestock graze on 95 million acres of permanent rangeland in Texas. An estimated 88 million of these acres are infested with woody plants that suppress the grass on which the livestock graze.

Exercises to be done in class

Create a company in which the following problems might exist. Generate a complete three-part communication purpose statement.

1. Purchasing a laptop computer
2. Choosing between two brands of pickup trucks.
3. Investigating whether to change from Styrofoam containers to paper.
4. Determining whether to pave a section of highway with concrete or asphalt.
5. Assessing the need to hire additional environmental engineers to design a wetland.

(*Source: Lay et al. 1995. *Technical Communication*. Chicago: Irwin.)