

EGG 102.2 – Introduction to Engineering Design (Spring 2001)

HOMEWORK #1: Due Tuesday, January 29th

Objectives:

- To practice writing problem statements
- To practice brainstorming

Strategy:

- Read the assignment at least twice
- Write a problem statement for the problem. You will need to explain why the design is needed.
- Suggest alternative solutions for the problem. You will need to brainstorm and suggest at least three solutions.

In writing the problem statements you will have to use “connectives” very often. Connectives are words that allow us to coherently express our thoughts. Connectives such as therefore, however, although, on the other hand, and in theory are commonly used in technical writing. A copy of the chapter “Connectives” from Thomas Huckins and L. Olsen’s book “Technical Writing and Professional Communication”, McGraw Hill, 1991, is attached. Study this chapter prior to doing the homework. Follow the general scheme showed below to write your statement.

The ABC of Problem Definition Writing

FACT, VALUE, BELIEF

BUT

FACT

HOWEVER

VALUE

IN SPITE OF

IN CONTRAST

ETC...

Example: The Desert Power Plant Unit 2 has been operating for over 40 years. Although Unit 2 is still functioning, its increasing demand for both major and minor repairs indicates that its two existing coals mills will need to be replaced soon.

Assignment:

- A. Create a UNLV email account at newuser.nevada.edu
- B. Write a problem statement (40-80 words) for each situation (1-3) and suggest three possible solutions to the problem. for the following design needs.
 1. A portable fan or cooling system that can be attached to a baby car seat.
 2. A soundproof wall for apartments.
 3. A bike path system for UNLV.

Please type your assignment. Check your spelling and grammar. Points will be deducted for poor grammar and spelling errors.

- C. Electronically submit this assignment to me piechota@unlv.edu via an MSWord email attachment.