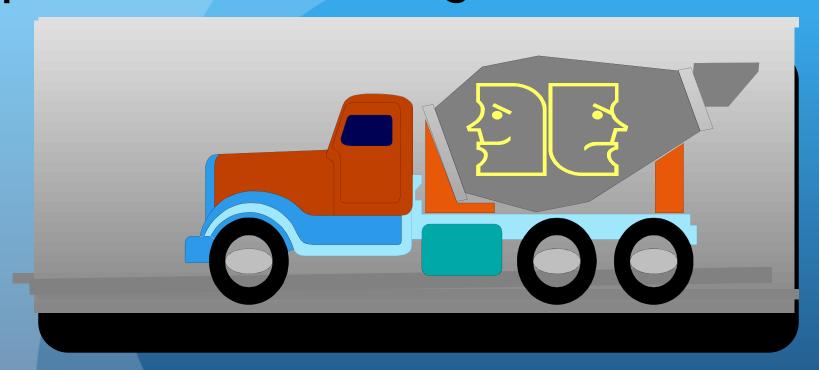
#### ROLE PLAYING IN THE CLASSROOM:

Preparations for the Young Professionals



LUKE M. SNELL

Senior Materials Engineer Western Technologies Phoenix, AZ

# The Majority of Communications for

Engineers and Contractors is the

Technical Memo and/or Letter

**Most Students** 

Complete

Their Degree

Without

Writing

**Technical Memos or Letters** 

# Physics, Chemistry Labs and

English Classes Write Reports and Papers

- Encourage students to be Verbose
- Explain Away Problems

#### First Year as Consultant Wrote **Technical Report** for Non-Technical Clients

#### Had to Learn to:

- 1. Be Accurate
- 2. Avoid Technical Jargon
- 3. Be Concise
- 4. Solve the Problem

#### **Engineering Challenges**

- EXCITING -

What I Studied!!

#### **Writing Reports**

#### **EXCRUCIATING**

What I Didn't Study!

## How to Write EFFECTIVE Memos

By Writing Memos with Feedback

#### Students are:

Company Representatives
Project Managers
Field Engineers

#### Professors are:

Employers
Supervisors
Clients
Irate Customers

# COMMON PROBLEMS WITH REPORTS

- 1. Tendency to include Inappropriate Materials:
- Client Does Not Want:
  - Raw Data
  - Calculations
  - Irrelevant Observations

#### Client

Wants

Results

- 2. Write to Impress Professors
- Uncomfortable in Making it Simple
- Perceive:
  - •Length = High Grade
  - More Information shows a Better
     Prepared Student

#### Write

to Inform

Client

# 3.Omitting Conclusions or Recommendations

- Want to Avoid Being Wrong
- Give Several Solutions Let
   Others Decide

#### **NEED**

A

**CONCLUSION** 

# 4. Write Obscurely Rational/Decision Cannot Be Followed or Verified

 Attempt to Hide Inadequate Research/Understanding With Obscure Writing NEED TO WRITE CLEARLY, SO LOGIC CAN BE **FOLLOWED** 

- 5. Poor Style and Poor English
- Spelling
- Grammar
- Words with Inexact Meaning
- Using Wrong Technical Words

### Need to Proofread and Use Spell Check and Grammar Checks

## 6. Sloppy Memos and/or Letters

- Unstapled
- Torn
- Poorly Designed Graphics
- -Hand Written

# Need to Recognize that YOU ARE Becoming a PROFESSIONAL

# Only Way to Learn to Write

is to Write

#### Professor's Responsibility

- 1. Give exact guidance where the student went off track
- 2. Do not accept poorly written memos- Make them redo (as in industry)until it is right
- 3. Make the memos a % of the grade so they can not be ignored
- 4. Be patient!!!

First Memos and Letters

Are Poor

90% Must Redo

First Memos and Letters are Poor

#### **Must Give** Appropriate Feedback SO the Students can **Improve**

#### At end of the Semester

90% of the
Memos and Letters
are done

CORRECTLY the first time

