

Best Practices to Communicate Clearly through Writing

The Live Webinar will begin shortly.....

Upcoming PE Institute Live Webinars

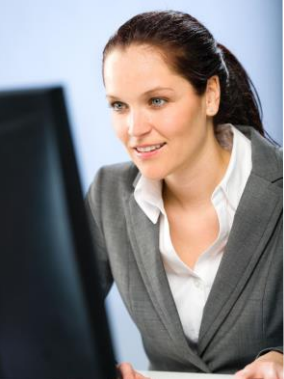
Wednesday, September 13 at 2pm

[Engineering Ethics: The PE as an Expert Witness](#)

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Best Practices to Communicate Clearly through Writing



Your Guides to *Success Enabling Skills™*

Learning Objectives

1. Proper mechanics for writing, such as structure, correct grammar, and tailoring content to a particular audience.
2. Guidelines for skilled development and organization of written communications.
3. What to look for when faced with certain situations, and rules-of-thumb for clear, concise, and nuanced writing.

Who am I?

- Over 30 years in professional practice
- Started out at PG&E in the 1980's
- Engineering business owner for 16 years
- Worked for various Engineering firms past 10 years
- President of the Engineering Leadership Institute, providing Success Enabling Skills™ to the Engineering industry

My Background



- BSCE from UC Davis - 1984
- Professional Engineer in six states
- Master of Public Administration (MPA) MSU Bozeman – 2011
- American Studies PhD Program MSU Bozeman
- Facilitator of *Success Enabling Skills*TM

My Lifelong Learning Journey

- Learn and advance my career
- My career wasn't moving fast enough
- MPA – Masters in soft/social skills
- Gap in soft/Success Enabling Skills
- Writing is an essential Success Enabling Skill

What do I have to offer?

- Practical experience managing Engineering Teams
- Balance of technical *and* soft skills
- Identified soft skill gaps of my Team members
- Filled the gaps
- Writing emerged as conspicuous and shared skill gap

Poll

According to a survey of Engineers and Technicians employed by NASA, how much of the work day was spent conveying information to others in writing?

- A. 10%
- B. 25%
- C. 33%
- D. 60%

Poll

According to the same survey of Engineers and Technicians employed by NASA, how much of the work day was spent receiving and interpreting written information from others?

- A. 10%
- B. 25%
- C. 33%
- D. 60%

Writing in Professional Practice



- 33% of the work day writing
- 33% of the work day reading/interpreting
- 2/3 of the work day on written information
- At a minimum!

Importance of Writing in Professional Practice

- Writing creates our reality
- Primary method of communication
- Professionals judged by their writing skills
- Cultivates and strengthens relationships
- Creates permanent records

Poll

What is the average number of writing mistakes per 100 words for Engineers?

- A. 10.1
- B. 10.9
- C. 12.6
- D. 14.5
- E. 19.3

Writing Errors per Profession*

- 10.1 - Writers
- 10.9 - Legal
- 12.6 – Design & Multimedia
- 14.5 – Engineers
- 19.3 – IT & Programming

* Average errors per 100 words





GUIDELINES

For Professional Writing



NATIONAL SOCIETY OF
PROFESSIONAL ENGINEERS

Guidelines for Professional Writing

- Understand your audience
- Use plain language
- Be clear and concise
- Know your punctuation
- Choose the right words
- Good sentence structure
- Spelling!

Understand Your Audience

- Identify
- Analyze
- Research
 - Demographics
 - Psychographics
- Formulate & verify your conclusions



Use Plain Language

- Facilitates understanding
- Increases audience comprehension
- Rules-of-thumb
 - Use an active voice
 - Technical terms -> common words
 - Minimize word use
 - Use short sentences and paragraphs
 - Communication design

Be Clear and Concise

- Use simple words
- Spell out acronyms first
- Be specific
- Eliminate unnecessary words
 - Excessive detail
 - Determiners and modifiers
 - Repetitive or redundant words

Know Your Punctuation

- Commas
- Comma dos
- Comma don'ts



Comma Dos

Commas join, set-off, or introduce clauses

- Joined by “and, but, for or, nor, so yet”

The problem was challenging, **but** she finished it on her own.

- Set-off clauses, phrases, and words

That, **however**, is a situation you will need to discuss with your Team leader.

- Introduce clauses

Omar spoke with his Team leader, **humbly admitting his error**.

Comma Dos

A list of three or more

He **analyzed, considered, and solved** the problem.

Adjectives that precede a noun

She is a dedicated Engineer.

She is a **dedicated, driven** Engineer.

Before quotations

According to **Henry Petroski**, “As engineers, we are in a position to change the world – not just study it.”

Set-off geographical names, items in dates, addresses, and titles in names

She introduced **Joe Smith, PhD**, as the guest speaker.

Comma Don'ts

Don't set-off words, phrases, or clauses that affect meaning

Incorrect: Engineers, **with poor writing skills**, may encounter career obstacles.

Correct: Engineers **with poor writing skills** may encounter career obstacles.

Don't separate unrelated adjectives that precede a noun

Incorrect: An **assertive, colleague** can be challenging.

Correct: An **assertive colleague** can be challenging.

Don't comma splice

Incorrect: She returns emails in the **morning, she** returns calls after lunch.

Correct: She returns emails in the **morning, and she** returns calls after lunch.

Poll

Which of the following has the correct word choice?

- A. To write the note, she used two pens and colored paper, too.
- B. You're computer smells hot.
- C. They're plans are over their on the table.

Choose the Right Words

- Similar words with different meanings
- Homophones
 - To, too, two
 - Your, you're
 - Their, there, they're
 - Its, it's
- Hyphenated words

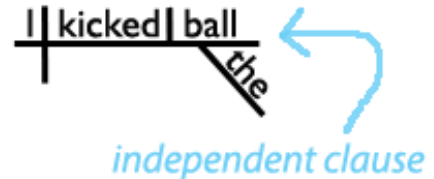
The Four Sentence Structures

- Simple
- Compound
- Complex
- Compound-Complex

The Simple Sentence

A simple sentence contains a subject and a verb, and expresses a complete thought.

Simple Sentence



independent clause

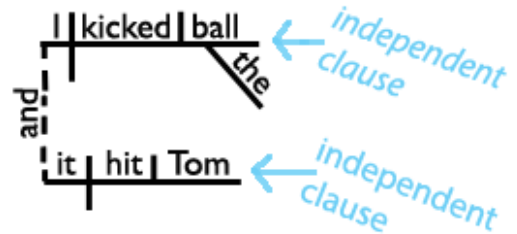
I kicked the ball.

- One independent clause
- An independent clause is a group of words that can stand alone
- Subject = “I”; verb = “kicked”
- “the ball” expresses a complete thought

The Compound Sentence

A compound sentence contains at least two independent clauses. A coordinating conjunction, or a semicolon, glues the two clauses together.

Compound Sentence



- Two independent clauses
- Two subjects and verbs
- Coordinating conjunction = “and”

*I kicked the ball and
it hit Tom.*

The Complex Sentence

A complex sentence contains a subordinate clause and an independent clause. A subordinate clause has a subject and a verb, but cannot stand alone.

- “Tom cried” is an independent clause.
- “because the ball hit him” is a dependent adverb clause.
- “because the ball hit him” is a subordinate clause.

Complex Sentence



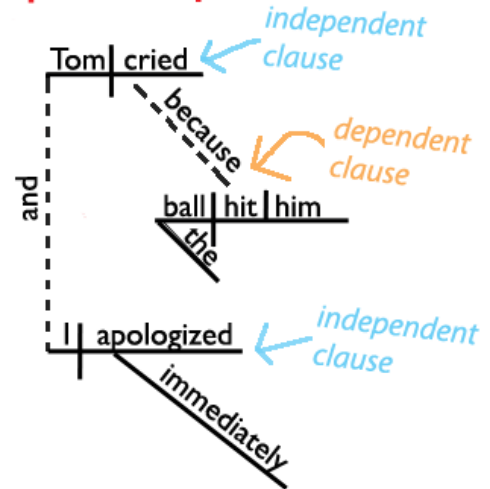
*Tom cried because
the ball hit him.*

The Compound-Complex Sentence

A combination of compound and complex sentences. At least two independent clauses, and at least one dependent subordinate clause.

- “Tom cried” is an independent clause.
- “because the ball hit him” is a dependent adverb clause.
- “because the ball hit him” is a subordinate clause.
- “I apologized immediately” is the second independent clause

Compound-Complex Sentence



*Tom cried because the ball hit him,
and I apologized immediately.*

Spelling!

- Spell checker
- Auto-correct
- Check spelling in every document



Poll

What is “Conversational Design”?

- A. Introduction, body, and conclusion
- B. Font, text size, and formatting
- C. Relationship, discussion, and action plan
- D. Speaking, listening, and discussion
- E. Outline, word choice, and presentation

Overall Rules-of-Thumb

- Conversational Design
 - Build relationship
 - Discussion
 - Action plan
- Say What You are Going to Say
 - Say what you're going to say
 - Say it
 - Say it again

Conversational Design Example

Send	To...	
	Cc...	
	Subject	16-52 Commercial Center - Survey Proposal

Dennis,

Good afternoon, I hope you and Nancy have been well. We have been retained to design, permit, and provide construction services for a new commercial project. I am writing to request a proposal from your firm for the required surveying services.

The project is 25 acres in size, will ultimately have 10 commercial buildings, and will be phased over a ten-year period. We will initially acquire the land use permits for the entire project, and will then originate and obtain approval of construction documents and provide construction services for Phase I. Phase I will consist of two 20,000 square foot buildings on five acres of the project site. I would like you to prepare a proposal for a topographic and boundary survey for the entire 25 acres, and construction staking for Phase I of the project.

Let's meet in the next few days so I can give you the information you will need to prepare a proposal, and answer any questions you might have. Please provide me with a couple of days and times that work for you.

Thanks Dennis, I will look forward to hearing back from you.

Sincerely,

Randy P. Wall, PE, MPA

President

(406) 451-6123

www.eli-mt.com



Poll

On a per job average, Engineers who write with 0-10 errors/100 words earn \$_____, while Engineers who write with 30+ errors/100 words earn \$_____.

- A. \$361, \$237
- B. \$521, \$310
- C. \$310, \$361
- D. \$521, \$237

Benefits of Excellent Writing Skills

- More effective communication
- Greater attention to detail
- Impresses Clients and Employers
- Faster promotion
- Higher compensation



At the Engineering Leadership Institute

- Success Enabling Skills™
- Online Performance Certification System™
- Furthers Learning & Development
- Mastery in your practice
- Fuels career advancement





Questions? Feel free to contact me:

Randy P. Wall, PE, MPA

President

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Best Practices to Communicate Clearly through Writing

To receive credit for this course, each registrant will need to take the quiz below and pass with a score of 70 or above.

Click link

<http://quiz.nspe.org/quiz/best-practices-communicate-writing.aspx>

to take the quiz.

Best Practices to Communicate Clearly through Writing

NSPE would like your feedback regarding this live webinar. Click link

<https://www.surveymonkey.com/r/8VL96JD>

to take a short survey.