



Writing Tips and Traps for Professional Engineers

An Online Continuing Education Course for Engineers

Course Number: PD-3008

Credit: 3 Hours / 3 PDH / 3 CPD

Writing Tips and Traps for Professional Engineers

Richard "Dick" Grimes, CPT

Course Overview

Let me be clear about something before we go any farther (or is it “further”): this WILL NOT be a rehash of that dry English grammar class you probably skipped in college as often as possible. There are too many reference books – in either paper or digital form – that you could use which would be more comprehensive. (And a lot cheaper too, but you couldn’t get three professional development hours of credit for them.)

The design of this course is based on the Pareto Effect - where 20% of a universe accounts for 80% of the impact. Although I admit I have no scientific basis, I intuitively sense that 20% of grammar rules and spelling errors account for 80% of the grammatical problems we see in everyday business writing. After all, we each tend to have our favorite phrases, buzz words, professional jargon, and communications styles, and it is reasonable to think that our errors will tend to repeat if we are not aware of them.



It will be a useful guide targeted at those few significant rules of grammar and key misspelled or misused words. It is written for the professional engineer seeking to be as careful and accurate in writing as in work. The quality of your writing speaks volumes about your self-image and career aspirations. Maybe you are familiar with the phrase “don’t dress for the job *you have* but for the job *you want!*” The same rationale works for your writing.

This will identify many common traps in grammar, sentence construction, and word usage that surround us daily in a workplace of people who feel it is sufficient to be simply understood rather than grammatically correct. After all, they reason, how many people write well enough (or is it “good enough”) in today’s workplace to notice the difference? They have a very legitimate, but sad, argument.

I *avoided obscure phrases* and *minimized tedious rules*.* I tried to include (or is it ‘tried AND include’) samples that you could see any day at work. We even get into digital communications because more and more workplace dialogue occurs there.

Finally, there is a bonus section that is closely associated with well-written documentation. It is a strategic model for a financial presentation. Although a well-written justification will not guarantee approval, a poorly written one will certainly not help it.

With all of that going on, may I suggest you print this and keep it handy at your desk? Thank you for selecting this course. I hope it is useful and helps to win a few arguments for you! (Or is it "...helps to win YOU a few arguments?)

Dick Grimes, Houston, Texas

*This is *parallel construction* and we will talk about it in a little while.



*This would be funny if it weren't so sad!
(Or is it "Wasn't so sad"?)*

Learning Outcomes

Participants in this self-study course will be able to:

- Avoid stepping into the most common grammatical traps found in so much of today's verbal and written communications
- Confidently construct sentences with parallelism for greater effectiveness and color in their writing
- Write confidently knowing why certain words and phrases are used beyond "they just sound good"
- Use colons and semicolons correctly
- Review a written document and quickly find grammatical errors and recommend solutions
- Use a successful model to create a financial proposal presentation with high chance of approval
- Avoid the use of common troublesome words and phrases in business writing
- Take a self-test to determine their current writing skills level
- Write more professionally and effectively in today's digital communications world

Intended Audience

The intended audience of this course is (or is it “are”) professional engineers who want to be defined as much by the quality of their writing as by the quality of their work.

It is also for someone who must review the written work of others – not technical specs but written documents in support of those specifications – before it passes on to an executive or client. “Review” meaning a high-quality work related document going out; not as if editing for a novel.

Finally, it is also for anyone in search of genuine self-development, regardless of whether it may lead to a promotion or career advancement. Remember, you will never know who will see your writing, and if it reflects a high quality of thought and execution, doors of opportunity may open that were never there before.

A Grammar Skills Assessment

In case you are still not sure whether this course will be useful, take a few moments to read this fictional update on a project. Underline all the grammatical errors or improvement opportunities you see and make a small note to yourself explaining why you made the correction. The answers begin on page 25 if you want to compare your results.

If you find more than fifteen errors, this course may not be very beneficial. However, if you cannot find that many, you have made a wise investment! (Note: there are no spelling errors.)

To: Logan Grant, VP Construction Operations

From: Cindy Richards, Project Manager

Before going any further, please except my apology for being late with this report.

Although me and my team promised it would be in your hands by 5:00PM yesterday, we are not using the fact that the project servers went down for five hours as an excuse. If I was able to get it to you quicker, I certainly would have.

Here is the current status on these project topics:

- **Project Interns:** *Alex and myself have finished the interviews of the six finalists and are submitting our recommendations for the two open positions in the attached memo.*
- **Portable Toilet issues** – *I talked with Steve Jones, the vendor for the portables on site, about how badly their units by the Admin building smell. He promised a solution to me this afternoon by 2:00PM. I will call him if he doesn't call me.*

- **Visitor Guides** – A group of supervisors from Tom Jackson’s area have volunteered to act as guides for the Chamber of Commerce visitors next Tuesday
- **Copier upgrade** – The vendor that handles our project copy equipment will give me a new quote by the 1st of the month.
- **Fire inspection reports** – Sue has been out for the past week and didn’t leave word who I should send them to. I’ll hold on to them until she gets back.
- **IT budget revisions** – The final numbers are in they’re about 2.5% more than expected.
- **Messenger vehicle repairs delayed**– Don Trucks thinks the cost of all the repairs were more than his budget would allow for this quarter.
- **Break room refrigerator** – The house keeper tells me there is usually some bag lunches left in the fridge over the weekend that she always has to throw out on Monday. My team and me will take care of cleaning out the fridge every Friday afternoon.
- **Quality Issues** – The number of errors increase as we speed production at the end of every month. Maybe we should look at some upstream process modifications. As a point of reference, before we began our policy of speeding month end production, we averaged 6.2 less errors per shift.
- **Headcount overage** – HR tells me my headcount is wrong. I have 6 in design and 4 in fabrication. How can I be over? Six and 4 are ten. My headcount for that group (I thought) is ten!
- **Paneling samples** – There was several samples of paneling that our team liked. Looks like this may be a harder decision than I thought.
- **Entrance bridge capacity** – According to the site engineer, one truck or three cars is the limit of the site entrance bridge capacity.
- **Landline upgrade in the conference room**– I have asked our telecommunications vendor for a proposal on cost and time to upgrade the audio equipment to better hear all participants on conference calls.
- **Next Project Team meeting** – The team are meeting again in the conference room at 9:00AM on the 15th.

Well, how did you score?

Did you find all twenty intentional errors or fall a long way short? If we use the 70% pass criteria required on the quiz associated with this course to earn your PDH credits, you must get at least fourteen correct. Did you?

Fundamentals of Speech

I promised this would not become your boring English grammar course from college, and I intend to make sure that it does not. However, I cannot assume every student purchasing it shares the same understanding of speech fundamentals. Therefore, we must go over a few items first to make sure we all start from the same point. (Unfortunately, I cannot think of an elegant or clever way to present these terms, so we may as well just get started.)

“Speech” is a collection of words strung together in a particular order to convey a specific message. Since the building block of speech is a word, it is essential to remember that a word can be used as different parts of speech depending on the message the speaker (or writer) wants to convey.

“You are the student” – “You” is the **subject** of the sentence and used as a **noun**. A **noun** can be a person, place, thing, or idea...

“The student is you” – Here, “you” is a **pronoun** taking the place of the noun in this sentence, the word “student”. The sentence is about the student. The student happens to be you.

“The course content surprised you.” – “You” is now a **direct object** because something happened to ‘you’: i.e., you were surprised by the subject of the sentence – the course content.

Here is another example of the same word being used as different parts of a sentence depending on the message we are trying to convey.

Noun – “Did you have an easy **drive** coming in to work today?”

Verb – “Did you **drive** the potential bidders away with your strict quality requirements?”

Direct Object – “I have more **drive** lately since I’ve been getting more sleep.”

Now that we agree a single word can be used in many ways and have different meanings, let’s look at the ways words can be used – **and used correctly in your writing**.

Adjectives

Adjectives modify nouns (names of persons, places, things, or ideas) by telling us something about them regarding *which, what kind of, or how many?*

- We decided to use **that** (“which”) **vendor** (noun) for the IT contract.
- The **huge** (“what kind of”) **project** (noun) begins next week.
- We gave the vendor a **thirty-day** (“how many”) **extension** (noun) to complete the installation.

Adverbs

Adverbs modify verbs telling us *how, when, or where*. When used to discuss *how*, they typically end in -ly. (“I want the promotion very bad” should read as “I want the promotion very badly.” *How much do you want the promotion? I want it badly.*)

- The project manager **quickly** (“how”) **stopped** (verb) the excessive waste.
- The meeting **will begin** (verb) **soon** (“when”).
- The ceiling panel **landed** (verb) **closely** (“where”) to the conference table.

Agreement

Agreement occurs when we use a verb that matches either tense or plurality like this:

- The **budget** is (singular) regular tense of the verb =
- The **budgets** are (plural) regular tense of the verb =
- The **budgets** is (plural) singular verb ≠

We touched on this topic in our previous lesson that we will cover later.

Colons and Semicolons

Two of the most confusing punctuation marks are the colon and semicolon. While many people use them interchangeably, there are clear rules for their use and explanation. In this lesson, we will stay with the 80/20 rule. So here are the rules for the greatest probable outcome.

