The semester has begun at MSU, and it is now time to implement some real initiatives for the future. For those of you who remember the weeks with Dr. Foss and the reports that were constructed, it is now time to continue the process and prepare reports that continually aim at better communication of the technical skills and knowledge that you possess. The year will be gone soon, and you will be graduating into job or graduate school, both of which require competency in your communication skills. This is a good time to hone those skills or get back on track after a period of absence. A couple of pages a week will come your way. I hope that you take the time to browse through the comments and take to heart the concern that we express for the need for all engineers to communicate in the best possible manner their ideas to the world.

The Good Report

always arrives when it is due.
makes a good impression.
quickly discloses its purpose and scope.
provides essential information.
contains no jargon.
contains required parts.

The Qualities of a Good Report

writing marked by a no-nonsense approach.
single minded and doesn't get sidetracked.
purpose spelled out early.
vocabulary tends to be specialized.
sentences are highly specific and fact filled.
the reader will see when necessary large amounts of:
  numbers
  dimensions
  signs
  symbols
  formulas
  graphs
  tables and things called "figures"

Intelligence and Knowledge

The reader for whom you write is just as intelligent as you are but does not possess your store of knowledge.
He is not to be attended by a recital in Technical language or things known to him telling him what is obvious.
He is not a student preparing for an examination, and he does not want to be encumbered with technical terms.
His sense of literary form and his sense of humor are probably greater than yours. Shakespeare, Milton, Plato, Dickens, Huxley, Darwin wrote for him.
None of them are known to have talked of putting in popular stuff and treating them to pretty bits or alluded to manners as being too complicated to discuss here. If they were, they didn't discuss them here and that was the end of it.

H.G. Wells to Julian Huxley while they wrote The Secret of Life
COMMON ERRORS

SUBJECT/VERB AGREEMENT

Make the verb agree with the subject in number and person.

These words take singular verbs: each, everyone, either, neither, anybody, somebody.

Watch: Each of the lines is tangent to the parabola.

Any and None are now commonly plural as in None of the freshmen are going.

When a compound subject is joined by or or nor the verb agrees with the closer noun or pronoun.

Either the vessel or the tubes are at fault.

Watch out for parenthetical expressions: The experiment, as well as the students, is boring.

Notice the information between the commas does not affect the verb.

The biggest thing to remember is: Find the subject and the verb of the sentence.

If you don't know the doer and the action of the sentence there is no way to get the subject/verb agreement right.

DICTION

Choose a word or words that are more accurate, effective, or appropriate to the situation.

Many different kinds of linguistic sins are covered by the general term diction. All involve a faulty choice of words.

Poor diction can involve a choice of words that are too heavy or pretentious: utilize for use, finalize for finish, at this point in time for now, and so forth. Tired old cliches are poor diction: with respect to, with your permission, with reference to, an many others.


FRAGMENTARY SENTENCES

Rewrite or repunctuate the sentence to make it a complete sentence or to join it to a complete sentence.

Most fragmentary sentences are either verbal phrases or subordinate clauses that the writer mistakes for a complete sentence.

A verbal phrase has in the predicate position a participle, gerund, or infinitive, none of which functions as a complete verb.

Norton, depicting the electromagnetic heart. (participle)

The timing of this announcement about Triptycene. (gerund)

Braun, in order to understand system control language. (infinitive)

When your fragment is a verbal phrase, either change the verbal to a complete verb or repunctuate the sentence so that the phrase is joined to the complete sentence of which it is actually a part.
COMPOSING

Are the following statements true or false when applied to the way you plan and write reports?

* In my planning and writing (that is, composing), I think about audience and purpose, as well as topic.
* I care about my writing. I want it to be considered competent.
* I can concentrate on one aspect of my writing at a time. For example, I can rough out my content without worrying too much about style and mechanics.
* I have a process for composing that I trust. Most of the time, my composing process produces the intended pieces of writing.

PARALLELISM

* Make the elements in a series grammatically parallel.

When you link elements in a series, they must all be in the same grammatical form. Link an adjective with an adjective, a noun with a noun, a clause with a clause, and so forth. Look at the italicized portion of the following sentence.

A good portion would use small amounts of plant material, require little time, simple to run, and accurate.

The series begins with the verbs use and require and then abruptly switches to the adjectives simple and accurate. All four elements must be based on the same part of speech. In this case, it’s simple to change the last two elements:

A good test would use small amounts of plant material, require little time, be simple to run, and be accurate.

Always be careful when you are listing to keep all the elements of the list parallel. In the following example, the third item in the list is not parallel to the first two.

The process has three stages: 1) the specimen is dried, 2) all potential pollutants are removed, and 3) an atomized specimen.

The error is easily corrected.

The process has three stages: 1) the specimen is dried, 2) all potential pollutants are removed, and 3) the specimen is atomized.

When you start a series, keep track of what you are doing and finish the series the same way that you started it. Nonparallel sentences are at best awkward and off-key. At worst, they can lead to serious misunderstandings.
ME AND MY COMMUNICATION

Number 3                                   _________________________        ME 451 Controls

One of the most important things to realize in the communication area is that you as the communicator need to know what is going on and why those things happen. Just spouting rules does not make a good communicator. We will attempt to get everyone on track by making each writer aware of the important elements in the text that is being produced. Therefore,

YOU MUST IDENTIFY IN THE TEXT BY NUMBER WHERE YOU HAVE ADDRESSED THE FOLLOWING ITEMS:

TITLE PAGE
1. Title of paper
2. Course
3. Date due
4. Section time
5. Name

ABSTRACT
6. Why was the lab performed
7. How was the lab performed
8. What was discovered, achieved, or concluded
9. Past tense used
10. Reference to experiment not paper
11. No personal reference (I, We)

NOMENCLATURE
12. In alphabetical order
13. Upper case then lower case
14. Arabic and Greek separated
15. Only symbols appear

TABLE OF CONTENTS
16. All sections represented
17. Abstract and Table of C not listed
18. Lab Observations as a heading
Analysis, equip, procedure, results - sub headings
19. All columns lined up

INTRODUCTION
20. Ample motivation for the experiment stated
20A. yours
20B. Whirlwind’s
21. Sufficient information to orient reader to the substance of experiment
22. Sufficient information to excite reader
23. Sections to follow mentioned

LAB OBSERVATIONS
24. Mathematical model used to predict system behavior presented with ample explanation and lead in
25. Equations numbered
26. Punctuation with equations (: with follow/ing only)
27. Equations have space
28. Schematic of equipment used
29. Figures/Tables correct (Figure 1. Title)
30. Figures oriented correctly, clearly labeled, and referenced

Stated:
31. Highlights of equip. used

32. Highlights of the procedure (not specific steps)
33. Data presented with clear indication of what data applies to
34. Reader will understand what this data refers to
35. Trends in data stated (then to be discussed in the discussion section)
36. Clear indication of what reader should see in the data

**DISCUSSION**

37. Complete discussion of the results appears
38. Connection of data and Whirlwind is clearly stated
39. Comparison to similar experiments is shown
40. Strong points of study given
41. Weak points of study given
42. Statements are specific
43. Logical progression to support conclusions that follow

**CONCLUSIONS**

44. "The following conclusions are supported by this study."
45. Conclusions are numbered
46. Conclusions are concise and highly specific
47. Vague statements do not exist
48. Conclusions directly flow from discussion

**REFERENCES**

49. Initials for first names
50. All information included
51. References #d in text [1]
SERIOUS PAPER RUINED?

The inhabitants of ancient Egypt were called mummies. They lived in the Sarah Dessert and traveled by Camelot. The climate of the Sarah is such that the inhabitants have to live elsewhere, so certain areas of the desert are cultivated by irritation. The Egyptians built the pyramids in the shape of a huge triangular cube. The pyramids are a range of mountains between France and Spain.

The Bible is full of interesting caricatures. In the first book of the Bible, Guinesses, Adam and Eve were created from an apple tree. One of their children, Cain, asked, "Am I my brother's son?" God asked Abraham to sacrifice Isaac on Mount Montezuma. Jacob, son of Isaac, stole his brother's birth mark. Jacob was a Patriarch who brought up his twelve sons to be patriarchs, but they did not take to it. One of Jacob's sons, Joseph, gave refuse to the Israelites.

Pharaoh forced the Hebrew slaves to make bread without straw. Moses led them to the Red Sea, where that made unleavened bread, which is bread made without any ingredients. Afterwards, Moses went up on Mount Cyanide to get the ten commandments. David was a Hebrew king skilled at playing the liar. He fought with the Philatelists, a race of people who lived in Biblical times. Solomon, one of David's sons had 500 wives and 500 porcupines. topic.

Without the Greeks we wouldn't have history. The Greeks invented three kinds of columns Corinthian, Doric, and Ironic. They also had myths. A myth is a female moth. One myth says that the mother of Achilles dipped him in the River Stynx until he became intolerable. Achilles appears in *The Iliad*, by Homer. Homer also wrote *The Oddity*, in which Penelope was the last hardship that Ulysses endured on his journey. Actually, Homer was not written by Homer but by another man of that name.

The above passage is obviously silly, but it does bring home a few important points. It helps to stress the need for serious consideration of the words that you employ in your text, the knowledge that you have of the subject, and the manner in which you present this information. In the above passage you lose any idea of a professional writer. You laugh along with everyone else at the mistakes. The problem is that the writer really felt that a learned piece of text was being created. It obviously failed to come about. Hopefully, you can also see the problems with the steady flow of ideas. No?
PREPARING THE 451 REPORT

WHEN YOU BEGIN:
BRAINSTORM
EVALUATE YOUR READERS
CHOOSE A PLAN
OUTLINE
WRITE YOUR FIRST DRAFT
COOL IT
REVISE
WEIGH CONTENT
EVERYTHING THERE?
CAN I REMOVE THINGS?
SECOND REVISION
INCREASE CLARITY
THIRD REVISION
MEET ALL STANDARDS
FOURTH REVISION
ACHIEVE BREVITY
FIFTH REVISION
IMPROVE STYLE

Revising takes time, but the effort that you expend will be made up in the grade, promotion, or recognition that you receive. Changing a few words in order to clarify your text can make immense differences in your future.

THE COMMA

SIMPLIFIED RULES:

To set off introductory elements --
*First, let us agree on the procedure.
*Because of the long review process, construction will be delayed.

To set off non-essential, interrupting and transitional elements --
*These calculations, which I redid yesterday, have the definitive answer. (non-essential between commas.)
*The chemical, Proxzon, is poisonous. (non-essential if only one chemical is
poisonous.
*The chemical Proxzor is poisonous. (Essential is a number of chemicals are poisonous.)

To separate two independent clauses joined by a coordinate conjunction -- and, or, but, for, nor.

*The introduction to the experiment was very complicated, and we felt that there was a need for more explanation.

To separate a series of three or more items.

*Be sure to use the transducer, the pipette, and the RDS.

To separate coordinate adjectives (adjectives that modify the same noun.)

*minute, coarse thermocouple
*practical, innovative design

(can you reverse the adjectives and add and between them - does it make sense -- then it's okay.)

To separate a declarative clause from a tag-on question.

*We will move the dial, won't we?

To prevent misunderstanding.

*Whatever you do, do it well.
*Tell Sarah, Mary is here.

To set off direct quotations.

"The parameters are between 3.5 and 4.7," said Dr.Haddow.
ME AND MY COMMUNICATION

SERIOUS MONEY FOR WRITING?

There is a good possibility that some ASME member here at MSU could be $1000.00 richer this coming February if he or she just puts his or her mind to work. The American Society of Mechanical Engineers has announced the annual Williston Award for writing prowess. All you have to do is produce a quality document on "Issues in Implementation of Alternate Energy Vehicles." There is a limit to the number of pages so that should make a lot of people happy. Information on the reverse of this page will help in producing text and additional information and any help that is needed will be provided by Craig Gunn. Why not try your hand at producing some quality far-reaching text. The practice alone could be highly beneficial.

OH!! - you do need to be an ASME member. If you aren't see one of the officers - it is very inexpensive to join and it's a nice addition to your resume.

BACK TO THE FUTURE BASICS

Looking over a few of the formals that are coming in and a number of tech memos from ME 412, I have noticed a few things that have cropped up that may need to be addressed in all future work.

Pronoun/antecedent agreement
Make sure that the pronouns that you are using (they, he, she, those) agree with the nouns that have preceded them.

The thermistors were placed in its flow.
Notice that the its doesn't go with the thermistors.
It sounds like it should be referring to something else. This raises confusion and the reader is sidetracked, and they don't like it. I hope you noticed the incorrect they.

Remember from high school -- each, everyone, either, neither, anybody, somebody, everybody, and no one take singular pronouns as well as singular verbs.

Each of the students had his/her own lab report.

BUT BE CAREFUL!!
Don't get hung up on being politically correct and then falling into mistakes like -

Each of the students had their own lab report.
Obviously you can remedy this by -
All of the students had their lab reports ready.

COMMA SPLICES

Make sure that the sentences that you create obey the rules for joining independent clauses.

USE SEMICOLONS OR COMMAS WITH COORDINATING CONJUNCTIONS - and, but, for, nor, yet - to join clauses.

I experiment, but you theorize.
The line fizzled, and it broke.
THINGS TO WATCH FOR IN REPORT # 2
READ THE INSTRUCTIONS IN THE COURSE PACK

1. MAKE SURE THE ABSTRACT READS LIKE ABSTRACT.
2. PUT EQUATION NUMBERS IN THE TEXT AND ON THE RIGHT SIDE.

3. REMEMBER THAT YOU ARE PART OF WHIRLWIND - IT IS AN IMPORTANT PART OF THE MOTIVATION.

4. DON'T FORGET THAT FIGURES AND TABLES ARE NOT CHARTS AND GRAPHS.

5. IN THE RESULTS SECTION MAKE SURE THAT YOU PREPARE THE READER FOR THE SECTION - IT IS IMPORTANT TO HAVE A BRIEF LEAD-IN TO SET THE READER UP FOR THE INFORMATION THAT YOU WILL PRESENT. THEY MAY ONLY READ THIS SECTION AND THEY NEED TO KNOW WHAT IT IS ABOUT.

6. BE BRIEF IN YOUR CONCLUSIONS. STATE THEM CONCISELY AND DO NOT DISCUSS OR PRESENT VAGUE GENERALIZATIONS. PUT THEM IN LIST FORM.

7. LASTLY, PROOFREAD THE TEXT. DON'T STOP AT JUST ERRORS. READ FOR FLOW AND A FEELING THAT A READER WILL ENJOY FOLLOWING THE TEXT.

8. GOOD LUCK!
PARALLELISM

Very similar to parallel lines, the issue of parallelism in writing seems to be more of a lack of care than a severe problem. The issue must be addressed though because it causes a reader to have difficulties in getting comfortably through a text. **SO...?**

Make all the elements in a series the same grammatically.

WHAT?

Thermistors
Bunsen burners
Pipettes
**Singing** ...notice the odd one

When you start a series, just keep in mind how you started it and maintain that through the course of the series. As sentences get complicated this act of watching takes on a more prominent role. You must look at every element within a series to verify that it is of the same construction.

Processing, reviewing, cataloging, and **nice**.

Get the point?

DANGLING MODIFIERS

**RULE:** Give the modifier something to modify.

Having finished the experiment, the equipment was washed.

**Did the equipment finish the experiment or did some person finish it?**

Yes, it is obvious but it is not clear; and the aim of all technical writing is to be **CLEAR**.

Always remember that if you allow a reader to interpret what you write they will interpret it incorrectly every time.

IMPROPER PRONOUN FORM

English 101 - Whenever a pronoun is the object of a verb or the object of a preposition, it must be in the objective case.

**It occurred to my colleagues and me to check the readings on the Verlotrac.**
**RIGHT!**
**He gave I the reading.**
**WRONG!**

**HOWEVER!**

Remember the predicate nominatives - those nouns that come after linking verbs (is, are, was, were).

Leave these pronouns as subjects.

**It is I.**
**It was he who drove the final mile.**
**RIGHT!**

**It was him who drove the - WRONG!**

CONSISTENCY---

Sequence of tenses
Shift of pronoun
Nonagreement
Pronoun reference
Subject/verb agreement --

**LOOK FOR IN THE NEXT ISSUE!**
CURRENT PAPER CONCERNS:

As you look at the writing that you are doing it is important to evaluate the kinds of things that may cause the reader to be uncomfortable with what you have constructed.

FOR EXAMPLE:

in the eyeball estimation.

Equation 1 is the same as Equation 2.

Our efforts would simply crumble to dust.

has shown itself to providing us with information.

Six different combinations were tested.

(What were they?)

___was determined from the graph.

___left out

.w. was found from___.

The results were not too bad.

Use maximum and minimum amounts for each spring.

This is sent to the VI by an accelerometer, with a magnetic base, that is on the mass plate.

Check List #1 and Plot #2.

(we will talk about this later)

All of the above can bother the reader from confusing language to information left out. These are simple examples of papers that didn't get proofread an edited by somebody other than the writer. If you aren't letting someone else read your work, please make an effort to do so. It will make a difference.

WATCH FOR:

NUMBERS.....

Rules are rules and here there are a lot of inconsistency..SO!

GENERALLY...Write out all numbers TEN and under, and rounded-off large numbers, as words.

six thermistors. a million dollars

BUT, when you are writing a series of numbers or when you use a great number of numbers in a set of lines - let the form of the larger numbers determine the form used.

five tubes and three pitots.

6 months and 25 days to complete

BEGINNING A SENTENCE:

Don't begin with a figure - always write it out.

COMPOUND NUMBER ADJECTIVES:

When two numbers are together - spell out the first one or the shorter one to avoid confusing the reader.

twenty 10-inch cables

100 twelve-volt batteries
TWO WORD NUMBERS:
They are hyphenated.
eighty-five experiments.
Thirty-seven are enough.

NUMBERS CONTINUED:

TECHNICAL UNITS OF MEASURE:
6 cubic feet, 4,000 rpm

FRACTIONS:
When a fraction stands alone, write it an unhyphenated compound.
two thirds, fifteen thousandths

used as an adjective hyphenate
two-thirds engine speed
twenty-five thousandths BUT usually
2/3 engine speed

FROM THE LAST TIME:
1. Sequence of tenses
2. Shift of pronoun
3. Subject/verb agreement --

1. Be very careful of the way you construct your text. Allow the reader to know when things are going on. The experiment is over so it is in the past - use past tense. The paper is in the process of being constructed and read, so work in the present or future tense. Present is fine.

2. The experiments were followed to its completion.

(might cause confusion)
He gave its report.

(should be his)

3. Check over the subjects and verbs. They do make a difference in the way the reader can interpret or misinterpret your text.

Six experiments was completed. The members of the lab team from ME 446 complete the work in record time. It never hurts to do a random look at the subjects that you use. Even better check them all just to make sure that they are correctly matched.

CREATING FIGURES: LABEL

What is this? Figure 1 – just isn’t enough.
AT ABOUT THE MIDPOINT:

Okay, the time has arrived to question what has been done thus far. No waiting until the CIRIS forms grace the airwaves. What kind of comments have you wanted on the reports that you have gotten thus far? What kind of comments do you expect on the reports that have, as yet, not been turned in? What areas seem not to have been covered in the construction of reports? What would help you in this class and others to produce reports that would be well received in the real world? How would you improve the quality of the reports that are being turned in for 451/461? There is no way to avoid constructing text. The world is full of it. Therefore, can you offer any insights into making the report writing maybe not easier, but more productive from your standpoint?

OKAY, HERE IS YOUR CHANCE TO OFFER CONSTRUCTING COMMENTS TO IMPROVE, HELP, OR JUST MAKE MORE COMFORTABLE YOUR FELLOW ENGINEERS. LET US FOLLOW THE LEAD OF THE PRESIDENTIAL DEBATE QUESTIONERS WHO SIMPLY WANTED THE CANDIDATES TO ADDRESS THE ISSUES. ADDRESS THE ISSUES - WHERE DO YOU SEE AREAS THAT ARE WORKING AND CAN YOU OFFER SUGGESTIONS FOR IMPROVEMENT? REMEMBER - THIS APPLIES TO THE CONSTRUCTING OF REPORTS AND HOW YOU ARE HELPED.

QUESTIONS FOR THOUGHT:

What would help you in constructing better reports?

What would you like in the opening lab on writing reports, now that you have had to construct one?

As you are putting together the reports is there any help that could be offered to improve the reports?

You are the instructor, you have to assign the formal reports, how are you going to make it more comfortable for your students, but still be a meaningful experience?
AFTER A WEEK WITH NO LAB
Are you ready (shades of Hank Williams Jr.) to get back into the swing of things? I'm sure that simply not having a lab this last week did not really take the pressure off the report writing. Those reports were still due in to the T.A.s, and the late night oil was burning from all quarters. That does show the importance of setting deadlines and adhering to a structure that allows you to produce text in the most relaxed manner that you can provide for yourself. Waiting until the last minute to begin, edit, and finish the report has only one real casualty and that is the writer of the report.

IMPORTANT
The report is not being produced simply for a T.A. or a professor or for a place on a dusty shelf. The report exists for the writer as a gage of the information that the writer has at hand, the information that may be lacking, and the style in which the writer produces text. When the writer fails to use the report as a real help in understanding the issues, experiments, and theories talked about, along with one's writing ability then the report loses a great deal of its value.

SO? Well the editorial is - If you are simply producing words for these reports, take a good look at them and see if they reflect what you know and what you perhaps could add to the report to broaden your understanding of the topic. Notice the important word is YOU. If you haven't been using the guides provided to produce the sections, it is time to begin.

ENOUGH SAID! Let the games resume. (That is not re-zoo-may.)

AREA TO ADDRESS: STYLE
Lots of people have been in to talk about the issue of style. This seems like an English and therefore a number of writers have said why bother, just get the facts down in whatever manner you can.

Well....

Style is simply the way in which you as a writer or communicator produce written or oral communication. This involves the language that you use, the punctuation that you put in or leave out, the length of your sentences, the way you connect sentences and paragraphs, the amount of information you give or withhold, the way you treat your audience, your choice of technical terms, your consistency. It is the stuff that great text is made of and also the debris of which horrible communication is also allowed to make readers ill.

THEREFORE CHECKOUT PAGE 2.
STYLE

The report's Format

Does it follow the prescribed outline?

Does it contain the material asked for in the instructions?

Have you given more than was asked for - or put it in the wrong sections?
(These are just basics.)

The Language that you use

Are you choosing words that clearly express your meaning?

Will the reader be allowed to interpret those words incorrectly? Can you prevent this?

Are you putting word combinations together in a manner that allows the reader to follow your train of thought?

The Structure of the text

Do you see a particular pattern in the way you construct sentences or paragraphs?

A. Topic sentence first - then five supporting statements - a concluding remark - next paragraph.
B. Six sentences - all with 17 words arranged in a subject, verb, direct object order - subject is always the first word in the sentence.
C. Eight lines make a paragraph - no semblance of order - just ideas with a capital letter at the beginning and a period at the end.

These are all a particular style, but that does not make it a worthwhile style for your text. (Elephant bell-bottoms pants were a style in the 60's, probably not too acceptable today.)

It is vital that you look at the way that you put your ideas together so that you get the most mileage out of your text.

The Cosmetics

Commonly referred to as punctuation, Capitalization, and rules; they are the things that can irritate readers without them even knowing it consciously.

Things like:

Inconsistency in use - you send conflicting signals when you fail to use the punctuation marks in the same way throughout the text.

Comma problems: Putting them everywhere or totally leaving them out. Do you know when to use them correctly?

Equation punctuation: Putting only colons (:) after words - follow,follows,following - before the equations. Otherwise don't put anything.

Don't put periods after equations. Don't forget to use equation numbers.

Figure etiquette: Call them figures not graphs. Use 1,2,3 not I,II,III or a,b,c

Make sure that they have titles. Figure 1. The effects of

All this and more reflects style. Remember that it is vital for you to be conscious of it because your readers and listeners are fully aware of it.
From the past and current papers--

**NEED CHANGING**

1. in the eyeball estimation...
2. Equation 1 is the same as equation 2
3. Our efforts would simply crumble to dust.
4. has shown itself to providing us with information.
5. Six different combinations were tested. (but doesn't say what they are)
6. output data was obtained for sex....
7. _was determined from the graph. (left out underlined info)
8. ,w, was found from .
9. Using the calculated values of a linear regression panel was run appendix to determine the slope.
10. The time trace was not bad, for that particular run anyway.
11. This is sent to the VI by an accelerometer, with a magnetic base, that is on the mass plate.
12. Use maximum and minimum amounts for each spring.
13. Everything was theorectally okay.

**GRAMMAR TIME**

**SEMICOLON**

The semicolon lies halfway between the comma and the period in force. Its use is quite restricted.

**Main clauses**

Place a semicolon between two closely connected main clauses that are not joined by a coordinating conjunction (and ,

but, nor, for, or yet.)

The expanding gases formed during burning drive the turbine; the gases are then exhausted through the nozzle.

If the clauses are long, have internal punctuation, or if separate emphasis is desired, then the comma before the coordinating conjunction may be increased to a semicolon.

The front lawn has been planted with a Chinese beauty tree, a Bechtel flowering crab, a mountain ash, and assorted small shrubbery, including barberry and cameo roses; but so far nothing has been done to the rear beyond clearing and rough grading.

**Series**

When a series contains commas as internal punctuation within the parts, use semicolons between the parts.

Included in the experiment were Peter Moody, a freshman; Jesse Gatlin, a sophomore; Burrel Gambel, a junior; and Ralph Leone, a senior.

**Last term at MSU?**

Get yourself a good writing guide to go with your engineering texts. *The Chicago Manual of Style* is also good to have. It's only $39.00.
An innumerable number of tiny veins now
at this point in time bright green
bright green in color we inoculated
we conducted inoculation experiments on because
due to the fact that while
during the time that fewer
fewer in number because, since
for the reason that is called
it goes under the name of if
if conditions are such that if
in the event that often
it is often the case that
the cause may be apparently
it is possible that the lenticular
cause is oval
it would appear that oval
lenticular in character the tube, 3m long
oval in shape the tube, 3m long
prior to before

ABBRVIATIONS

Just a short little space to say a few things about abbreviations.
Your world of science and technology is filled with myriads of abbreviated terms.
Always be aware of the audience who will pick up your written text. They may or may not understand the quick and easy letters with which you fill your papers. Make sure that anything that you use is clear and documented. Do not assume anything.

RULES:
1. Use sing. form for both sing. and pl. (some don’t)
2. Use lower case/except/proper nouns and adjectives
3. For technical terms use period after words that spell out complete words
4. Organization names/no periods or spacing
5. Do not abbreviate term of measurement if not preceded by arabic expression of exact quantity

THE END
ME AND MY COMMUNICATION

Number 11                           ________________________                ME 451 Controls

JARGON

Defined by the dictionary
1) confused, unintelligible language; 2) technical terminology of a special group or activity; 3) obscure and often pretentious language marked by circumlocutions and long words.

All of the above should be avoided as much as possible. We only say this because it causes problems with the understanding of the text. Jargon may seem like a neat way of saying something, but your readers may misinterpret what you have to say. #s 1 and 3 should always be avoided, but # 2 might be difficult in your technical area. Technical writers do find that they can use the jargon freely, but only after it has been defined or explained to the reader.

BIG WORDS VERSUS THE REGULARS

When you have a choice of using something that says what you want to say or something that makes you sound overinflated, the best course is to go with the simpler term. The reader will not be allowed to interpret what your text says. They will take their lead from you and understand what you want them to understand. The next column has a few examples that would easily work in a scientific or technical area, but I think that we probably would rather have them stay in their regular terminology.

1. As a case in point, other authorities have proposed that slumbering canines are best left in a recumbent position.
2. It has been posited that a high degree of curiosity proved lethal to a feline.
3. There is a large body of experimental evidence which clearly indicates that members of the genus Mus tend to engage in recreational activity while the feline is remote from the locale.
4. Even with the most sophisticated experimental protocol, it is exceedingly unlikely that you can instill in a superannuated canine the capacity to perform novel feats of legerdemain.
5. A sedimentary conglomerate in motion down a declivity gains no addition of mossy material.
6. The resultant experimental data indicate that there is no utility in belaboring a deceased equine.
7. From time immemorial, it has been known that the ingestion of an "apple" (i.e. the pome fruit of any tree of the genus Malus, said fruit being usually round in shape and red, yellow, or greenish in color) on a diurnal basis will with absolute certainty keep a primary member of the health care establishment absent from one's local environment.

OKAY YOUR TURN - WHAT ARE THEY IN SIMPLE LANGUAGE?
DID YOU SAY REFERENCES?

Most everybody is doing a great job in citing the texts where information is either being copied word for word or paraphrased extensively. The few bits of information that we handed out at the beginning of the semester seem to have done the job for our purposes. This is fine but questions do arise, and I thought that it might be as good a time as any to make some mention about referencing in the work that you are producing.

FIRST - Check the publication that you are sending to / the professor you are writing for / or the company that you are working for - IF THEY HAVE A STRICT FORM FOLLOW IT. If they don’t you can use any appropriate form as long as it is consistent.

SECOND - Use only the important material in the references. Sometimes this list gets cluttered with great numbers of sources that may allude to the issue or quote but are not really important.

THIRD - Proofread the reference list carefully. Make sure that all the entries are the same within their designation - book, journal, whatever.

OKAY - STYLE

I just read a passage that says that one reader looked at 52 scientific journals and found 30 different styles for listing references. That certainly tells you to check before you submit. As I said most students have done well this semester in this area because they have checked the form that we want.

THE MOST COMMON FORMS

Name/year - "Smith (1962)"

Alphabet/number - (13) - from an alphabetical list at the end

Citation/order - (13) - in order as they appear in the text

Examples:

Name/year


Alphabet/number

1. Friten, R.B. 1987 How to Construct Fractals. 2nd Ed. Lansing,MI: John's Press.

Citation/order

1. Friten, R.B. How to Construct Fractals. 2nd Ed. Lansing,MI: John’s Press, 1987

This only hits the tip of the iceberg when it comes to using and documenting correctly the references that you use. If you take a look at the Modern Language Association style guide or The Chicago Manual of Style you will find a wide array of styles and forms - the biggest concern is that you be consistent within an acceptable form. Always check the form for your publication or prof. IT IS VITAL!!!
LAST BITS OF INFO.

As the semester draws to a close and a great number of engineers are heading for the working world, maybe it would be appropriate to scan over some information that is provided by Henry Roger's in his text, Rogers' Rules For Success. It is interesting that most of the material that he speaks about relates almost word for word to the things that are spoken about in regard to producing text in your courses. Success depends a great deal upon the way that you are perceived. Rogers tells the reader to know the audience that he or she is talking to so that the writer will know how to adjust his or her language and the level of information that is imparted. He also says to speak to issues that interest the audience. Remember that if they aren't interested, it is your job to create an interesting atmosphere. Research that you have done in the courses that you have taken can show you that the collection of material is vital if you are required to formulate conclusions and recommendations. How better to think about presentations, meetings, or text production then learning about your audience so that you can provide them with just the right information.

Rogers provides tips on a number of areas that can be helpful to all of us in the future. As the semester ends presentations must be given, interviews taking, and references asked for. Here are Rogers' suggestions on Talking.

1) Think before you speak. Stress what you say, how you say it, and when you say it.

2) Know your target audience. Are they professors, students, employers, or?

3) In a one-to-one conversation, allow some time for small talk to put the other person at ease (and maybe you too).

4) When addressing groups, be sensitive to their needs and watch how you address them.

5) Look at you audience.

6) Speak slowly and distinctly. If you start to lose control - stop, take a deep breath, or take a drink of water.

Notice that these things are not counter to anything we do with the written text. Communication in all its forms is going to be vital to your careers, and the way that you use all the particulars forms will reflect not upon them but upon you.

SCORING POINTS

1) Always have an objective when you speak (or write).

2) Do not interrupt when others are speaking.
3) If you are in a meeting that has lost its focus, gently try to restore a sense of direction.

4) Accentuate the positive whenever you speak. If there is good and bad news, do the good first. If you can tie the bad news to something positive.

**TIMING**

Make sure that you choose the appropriate time to voice or send your communications. Hitting the reader when there are a thousand other issues at hand may destroy your message. Trying to barge in when the time is not right could possibly destroy any chances for ever being heard.

Here are a few suggestions:

1) Don't try to discuss important issues with people who are extremely busy or distracted.
2) Don't try to discuss these same issues when you are busy or distracted.
3) If you deal with people on a regular basis, learn to spot their mood swings. Check the times on day or occasions when they are most receptive.

**LISTENING**

You will find yourself in many positions where you need to listen before you speak, so:

1) Think about what is being said.
2) Blot out all distracting thoughts from your mind.
3) Concentrate exclusively on what the speaker is saying.
4) Look the speaker straight in the eye.
5) Let the speaker know that you're listening by asking occasional appropriate questions.
6) Don't interrupt the speaker's train of thought.
7) Make notes on what is being said under proper circumstances (meaning take notes if it is okay).

The final words from Rogers on Communicating go as follows:

1) Stop, look, think, and feel! Communicating involves not only speaking and listening, but sensitivity to the sensitivities of others.
2) Think of the other person's needs and interests before your own.
3) Don't sweep your communications problems under the rug - talk them out.
4) Fight the normal tendency to take long-standing relationships for granted - keep communicating. Communication is more difficult to maintain with long-standing relationships than with new ones.
5) Watch for the signals that communication may be breaking down.

**AS THE SEMESTER DRAWS TO A CLOSE, GOOD LUCK WITH ALL THE COMMUNICATION TASKS AHEAD.**

As we close here are just a few odds and ends that didn't seem to fit into the
two pages that I was allotted. get the most mileage out of your text.

**The Presentation:**

Know the material.  
Make it spontaneous (don't memorize).  
Tune into the audience.

Visuals  
make them legible  
well designed  
simple  
single concept at a time  
make horizontal  
30 letters to a line  
4 to 6 lines

Make sure that there are goals:  
**YOURS and THE PAPER’S**

Plot the organization:  
introduction - attention getter  
body  
conclusions - and future recommendations  
closing - summary of main points  
ending - last thought

Make the most of every speaking experience. Whether it be short or long - casual or formal; They all are important.

It is hoped that this work will stimulate further work in the field.

Correct within an order of magnitude.

...as good as can be expected. These are all a particular style, but that does not make it a worthwhile style for your text. (Elephant bell-bottoms pants were a style in the 60’s, probably not too acceptable today.)  
It is **vital** that you look at the way that you put your ideas together so that you