

# Writing Scientific Papers

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# Writing Challenges

- As a student studying medical sciences, you report your findings. All scientific writing has the same goal: to present data and ideas in detail that allows your readers to evaluate the validity of the results and conclusions based only on the facts presented.

# Challenges in Writing

- Syntax            sentences, style
- Grammar        agreement, singular/plural
- Mechanics      spelling, punctuation
- Organization   cohesion, unity, tone
- Process         data collecting, literature review
- Audience analysis   appropriateness
- Content         clear, simple, concise, strong,  
correct, positive, precise

# Challenges Writing Nonfiction

- Essays
- Reports
- Case studies
- Research proposals
- Book reviews
- Brief research reports
- Literature reviews

# Challenges Writing Nonfiction

- Reflective writing
- Writing introductions: background & rationale
- Research methods
- Research results
- Research discussions
- Writing conclusions
- Research abstracts
- Research dissertations and theses.

# Challenges in Writing Styles

- What native speakers of English consider logical, clear and effective writing is cultural.
- “Western writing is linear, Asian writing is circular, while Semitic writing consists of series of parallel structures more often coordinated than subordinated”  
(Kaplan, 1966)

# The Rhythm of English

- To be or not to be, that is the question.”

“All the world’s a stage, and all the men and women merely players; they have their exits and their entrances, and one man in his time plays many parts...”

# Asian Writing Style

The researcher, presented the research data, thus answering the research questions in accordance with the objectives of this research which the researcher has described below.



# Middle East c.450-180 BCE

There is a time to be born, and a time to die; a time to plant, and a time reap;

A time to kill, and a time to heal; A time to weep, and a time to laugh; a time to mourn, and a time to dance;

A time to cast away stones, and a time to gather stones together;

A time to embrace, and a time to refrain from embracing; a time to keep silence, and a time to speak;

A time to love, and a time to hate; a time of war, and a time of peace.

# Nonwestern Writing Style

- Thesis or main point occurs at the end of the text.
- Language has more passion than normal
- The direction appears circular or digressive
- Readers are expected to draw their own conclusions
- Authors cite people more than five years past
- Author's voice is humble rather than assertive

# Western Writing Style

- Logical
- Linear
- Direct
- Expressive
- Strongly worded
- Concise
- Precise
- Conclusive

# Thai is Repetitive

- Thai language, Thai people, Thailand
- Big size
- Red color

# Thai is Indirect

- Seems to
- Might possibly
- Appears to
- Could be
- Was likely
- Tried
- Attempted to
- May have resulted from

# Soft vs. Strong

- Satisfaction appeared low vs.  $\leq 1.5\%$
- Seemed not related vs. Completely unrelated
- Might possibly vs. Most probably
- Attempted to vs. Endeavored to

# West vs. East

- American readers expect cover letters to be short and to the point. They begin with the purpose and end with a reminder.
- Please take a moment to review our paper describing the SMEs in the Thai Gulf Region.
- Kindly let us know if our article is suitable for your journal. We look forward to a positive response

# East vs. West

- Japanese readers begin with pleasantries and conclude with even more.
- Greetings from the Japanese National Institute of Development.
- Please know that we are delighted to submit our paper to your esteemed journal and wish your company prosperity in the year ahead.





# Find the Monkey

- Do you have the current 2016 population statistics available?

# Achieving the Scientific Writing Goal

- Use strong verbs
- KISS
- Use precise wording
- Avoid weak structures
- Be polite
- Be positive
- Use words correctly

# Practice with Strong Verbs

Aging society **has** many challenges

- Faces, presents, exhibits, displays, shows, demonstrates, reveals, indicates, involves

Analysis of sex and obesity was performed by one way Anova.

Some patient behaviors were different than before.

# Weak Verbs Make your Writing Basic

- Be
- Do
- Have
- Come
- Go
- See
- Seem
- Give

# Active Verbs Strengthen your Writing

Take

Keep

Make

Put

Send

Say

Let

Get

# Practice with KISS

Scientific writing is concise

- Eliminate wordiness
  - In the near future
  - Having the capability
  - On the occasion of

# Practice with KISS

Scientific writing is concise

- Avoid redundancy
  - Actual truth
  - End result
  - Future plans



# Use Words Precisely

- The committee (affected, effected) a appropriate solution.
- The research promotion (implicated, implemented) quiet fruitful results.
- We will pay for our (graduate, graduated) study in Thai bath.

# Use Words Precisely

- The Thai restaurant was good.
  - Location, price, atmosphere, view, menu, cleanliness, comfort, convenience, taste
- Office equipment and other things were included under capital costs.

# Avoid Weak Structures

- It was a retrospective study conducted in July.
- There are three Bangkok attractions popular with Chinese tourists.
- There were three groups of tourists of the local area who made the decision to take the cruise.

# Be Polite

- Airport immigration officers were scrutinizing arriving tourists for MERS victims.
- The study included mentally handicapped children whose parents were infected with AIDS.
- The samples in the study included Hmong and Karen minorities.

# Be Positive

Promotional literature including the website and brochures were not included in the review.

It is important to use not only the existing literature but also qualitative methods because they do not come from the same source.

The tests were done two weeks apart so subjects would not remember the questions and the environments would not be similar to the previous test.

# Use Words Correctly

Error analysis of 88 random abstracts

- Articles 23%
- Verb tense/agreement 18%
- Singular/plural 17%
- Mechanics 15%
- Word choice 15%
- Missing words 10%
- Word form/order 10%

# Use Words Correctly

(A, An) uniquely innovative strategy

(A, An) UNWTO World Tourism Barometer

Subjects who passed this criteria were included.

Office equipments and other items have arrived.

Data was collected at four TAT Centers.

# Use Verbs Correctly

- Verb tense
- Regular and irregular verbs
- Active and passive voice
- Mood
- Verb forms



# Types of Verbs

- Action verbs
- Linking verbs
- Helping verbs
- Verb phrases

# What Verbs Tell You

Tense	when the action takes place
Person	who or what experiences the action
Number	how many subjects receive the action
Voice	whether the subject acts or is acted upon
Mood	the attitude expressed toward the action

# Tense – when something happens

- Verbs have six tenses
- Each tense has two forms - basic & continuous
- The basic form shows action, occurrence or state of being that is here and now
- The basic form is also the base for future form

# Practice with Tense

Example 1. Kite day at school is (come, coming) up soon!  
[Coming is the present participle of the verb come.]

- Last year I (winned, won) the prize for the smallest kite that flew.
- My kite (measure, measured) three inches tall and two inches wide.
- I (coloring, colored) it bright red so that I could see it against the sky.
- Many people happen to (known, know) how to build a kite.
- You have to (plan, planning) for enough surface but not too much weight.

# Practice with Tense

- Example 2. Have you (built, build) your kite yet? [Built is the past participle of the verb build.]
- My class (studied, studying) the math behind kites and how they fly.
- A tail (help, helped) my tiny kite fly.
- Tails appear to (added, add) a balance to light kites.
- This year I am (built, building) a really big kite!
- I am going to (used, use) my math and geometry to design it so that it will fly high.

# The Six Verb Tenses

Tense	Basic form	Continuous
Present	Walk	Am walking
Past	Walked	Was walking
Future	Will walk	Will be walking
Present perfect	Have walked	Have been walking
Past perfect	Had walked	Had been walking
Future perfect	Will have walked	Will have been walking

# Tense

Past	Present	Future
Past simple	Present simple	Present simple
Present perfect		Future perfect
Past perfect		
Past continuous	Present continuous	Future continuous
Present perfect continuous		Future perfect continuous
Past perfect continuous		
Events before now	Events now	Future events

# Principle Verb Parts

The tense of verbs is formed from helping verbs and principle parts. Each verb has four main parts.

Present	Present participle	Past
Look	Looking	Looked
Dance	Dancing	Danced
Present	Present participle	Past



# Principal Verb Parts

- The present is used to form the present tense ( I look) and the future tense (I will look). We use the helping verb will to show the future
- The present participle forms all six of the progressive forms (I am looking, I was looking...)
- The past tense forms only the past tense. Like the present tense, the principal part stands alone.
- The past participle forms the past perfect (I had looked) present perfect (I have looked) and future perfect (I will have looked) tenses

# Regular and Irregular Verbs

- Past tense and past participle forms are created by adding d, ed or t to the present form but the vowel doesn't change, e.g., walk, walked, walked.
- Past tense and past participles have many forms, e.g., begin, began, begun. In others, the vowel changes and a d or t is added, e.g., lose, lost, lost

# Regular and Irregular Verbs

- Of all the irregular verbs lie and lay, sit and set and rise and raise are the most often confused.
- Lie means to repose: lie lay lain. Sit means to be seated or to rest: sit sat sat. Rise means to go up or to get up. They are intransitive verbs, meaning they never take an object: you ought to lie down, sit down, rise up.
- Lay means to put something down or to place something: lay, laid, lain. Set means to put something in a place: set, set, set. Raise means to lift something up or to cause something to rise. They are transitive verbs and take an object: lay it down, set it down, raise your hand.

# Practice with Irregular Verbs

- I had (set, sat) the scissors down in the kitchen.
- The cattle had (lain, laid) under the oak trees for quite a while.
- Has the price of wheat (risen, raised) again?
- Has the puppy (lain, laid) the chew toy down yet?
- After that, we two (sat, set) quietly and thought about the future.

# Practice with Irregular Verbs

- 6. Please do not (rise, raise) the umbrella in the house.
- 7. Were you (laying, lying) in the hammock?
- 8. Myron is (sitting, setting) colorful napkins next to the plates.
- 9. She (raised, rose) up and started to protest.
- 10. I (lay, laid) there for a while.

# Regular and Irregular Verbs

- Tip
- The most irregular verb is to be. It's principal parts are be, being, been, am, is are, was, were.

# Irregular Verbs

Present	Present participle	Past	Past participle
Cost	Costing	Cost	Cost
Set	Setting	Set	Set
Become	Becoming	Became	Become
Bring	Bringing	Brought	Brought
Find	Finding	Found	Found

# Irregular Verbs

Present	Present participle	Past	Past participle
Begin	Beginning	Began	Begun
Choose	Choosing	Chose	Chosen
Ride	Riding	Rose	Risen
Hold	Holding	Held	Held
Lead	Leading	Led	Led
Prove	Proving	Proved	Proven



# Tip

- As you learn more irregular verbs, you will probably notice patterns in the way they make their past forms.
- For example, the verbs lend, send, and spend follow the same pattern. They each form their past and past participles by changing the last d to t.
- The verbs begin, drink, ring, shrink, sing, sink, and swim follow the same pattern of vowel changes to a, then u).
- Learning these patterns may help you make verb forms correctly. Look for other patterns, too, as you study irregular verbs.

# Practice with Irregular Verbs

- Calinda (took, taked) her sister to the rain forest exhibit at the museum.
- Do you know what year the Lusitania (sank, sunk)?
- Claudia has (drew, drawn) a picture of the meadow behind the cabin.
- The camels have (drank, drunk) an enormous amount of water and are ready to begin their journey across the desert.
- The three boys had (ran, run) as if they were being chased.

# Practice with Irregular Verbs

- On Tuesday, Alfonso (wore, worn) the sweater that his mother gave him for his birthday.
- Ms. Shapiro (drove, driven) the school bus for our field trip.
- Small meteors have (fell, fallen) recently near Peekskill, New York.
- The teacher (rang, rung) the bell to get the students back to their desks.
- In the last race, gusts of wind (blew, blowed) a sailboat off its course.

# The Verb's Voice

- In addition to showing time, action verbs show whether the subject performs (active) or receives (passive) the action.
- Linking verbs do not show voice

# Active Voice

- A verb is active when the subject performs the action.
- The researcher interviewed the 22 subjects.
- In the active voice, the sentence begins with the subject.

# Passive Voice

- A verb is passive when its action is performed upon the subject.
- The tourists were interviewed (the researcher is not indicated).
- In the passive voice, the sentence begins with the object.

# Voice

- Tip
- When possible, use the active voice because it is more direct and stronger. Using the active voice makes your writing active and the sentence is usually shorter
- The passive voice is preferred when
- The subject is unknown - My wallet was stolen
- The event is negative - A mistake occurred

# Voice

- A lower proportion of DEC than other age groups was reported by immigrants aged older than 50 years.
- Informed written consent were submitted by the subjects.
- Slower reporting of DEC intake taking was observed among immigrants who recently arrived in Thailand ( $\leq 12$  months) than among immigrants affirming longer lengths of stay.



# Mood

- Most sentences are written in the indicative mood which states a fact: the sun rises.
- Requests and commands are in the imperative mood: help me!  
The subject is understood.
- Questions are in the interrogative mood: Why not?
- The conditional mood is often called an if clause: If you could help her you would appear more friendly.
- The subjunctive is used for wishes and unreal situations: When I was a dog, I had a short tail or When someone sneezes we say, 'God bless you'!

# Practice with Mood

- 1 If I (was, were) you, I would run.
- 2 I wish he (was, were) able to type faster.
- 3 His requirement is that everyone (is, be) computer literate.
- 4 He recommended that each driver (reports, report) his tips.
- 5 If I (had been, was) the dean, you would have been the deputy dean.

Identify the mood

- 6 \_\_\_\_\_ I wish he were kinder to me.
- 7 \_\_\_\_\_ If only she would be kinder to me.
- 8 \_\_\_\_\_ Give me back my money.
- 9 \_\_\_\_\_ Would you please give me back my money?
- 10 \_\_\_\_\_ Bangkok is the capital of Thailand; Rangoon is not the capital of Myanmar.

# Verbs Followed by the Infinitive

- Finally we decided to go on the field trip.
- We need to
- We have to
- We ought to
- I managed to
- He planned to
- The patient was encouraged to
- Instructed to
- Prepared to
- Requested to
- Expected to
- Would like to
- arranged to

# Verbs Followed by the Gerund

- Considered
- Finished
- Like
- Prevent
- Recommend
- Suggest
- Propose
- Appreciate
- Avoid
- Involve
- Risk

# Verbs Followed by Both

- Began
- Started
- Advised
- Stopped

# Correct Verbs Summary

- A verb's tense shows when action takes place
- Verbs are either regular or irregular based on how the verb forms its past tense and past participles
- A verb's voice shows whether the subject acts or is acted upon.
- A verb's mood indicates a state of being or reality
- The infinitive and gerund follow certain verbs

# Review

- ...by using ambulatory blood pressure monitoring
- The way we do cataract surgery has changed forever.
- Analysis was made of cost of treatment.
- ...prior to BP measurement
- It is necessary to have enzymes of myocardial higher than 99 percentile.
- In the perforation group (Figure 1), which consisted of 11 patients...

# Review

- using
- ophthalmologists perform
- treatment costs were analyzed
- before
- myocardial infarction requires
- consisting of, composed of, comprising



# Review

- They tend to feel nervous when presented to the clinic.
- Age, male gender, tobacco and alcohol drinking was associated with diverticulitis
- The patients composed of 75 patients in the IBS group
- Type of IBS did not effect the prevalence of colonic diverticular disease
- Written consent from was given
- The bowel was prepared

# Review

- attending
- being male, smoking and alcohol consumption
- group comprised 75 subjects
- affect
- was obtained
- bowels were

# Review

- ...the administration office of the medical college
- Cataract surgery becomes a minimal invasive procedure
- It is the important time to study
- ...out of the remaining 36 patients
- Three dimensional computed tomography
- After surgery, he saw normal vision returned.
- All areas were x-rayed, expectedly the orbitozygomatic bone.

# Review

- Medical College Administration Office
- has become, minimally
- The optimal time to study is
- of
- 3-dimensional
- The patient's vision returned to normal
- especially

# Review

- We had the observation of good clinical outcomes in the treatment of these groups of patients
- ...realizing the position of the normalization of the orbital bone
- ...for the prevention of injury to the optic nerve cataract surgery was done in cataract patients
- Evaluation of postoperative outcomes was performed

# Review

- were observed... in treating
- normalized
- To prevent...performed, carried out
- were evaluated