

Cactus Communications

Writing Essentials: Preparing for Publication



Distributed at lecture by
John D. McDonald
in Beijing, China
September 3, 2014

editage 意得辑
by CACTUS

意得辑 - 全球学术论文发表服务专家

1

editage 意得辑
by CACTUS

意得辑 - 全球学术论文发表服务专家

www.editage.cn

Lecturer Intro



Editor & Trainer, Academia CACTUS
Coordinator, GIST 
Over 1000 papers revised

A strong functional knowledge of the concerns researchers and academics have when writing in English



2

Icebreaker

Why are you here?

- Common experiences
- What are 5 things you hope to achieve from this session?



3

Overview

Topics

- Trends in research writing
- Preparing to write your paper
- Journal paper organization
- Ethical concerns in research writing
- Language shift & style in research writing
- Functional sentences
- Clarity in paragraphs
- Computer use in writing
- Real-world samples



4

The misconception

Writing is something that you do for other people and the final quality depends on the perception of your writing by other people



5

The reality

The final quality of any paper depends primarily on the quality of the original BEFORE that text has been edited



6



TRENDS IN RESEARCH WRITING



7

Big Science

In 1911, Rutherford discovered that atoms have a nucleus – a breakthrough discovery



The experiment was completed by Rutherford, 1 post doc, and 1 undergraduate

In 2012, evidence was found to prove the existence of the Higgs boson



The experiment was completed by 2500+ physicists around the world

8

Top research trends

1

Federal funding

Expect cuts in funding.

2

Financial innovation: Attack of the megafund

Use financial engineering to secure funding for research.



9

Top research trends

3

Reimbursement: Can value drive innovation?

Use Pharma industry is concerned about R&D spending and losses due to possible cuts in healthcare. This could affect innovation. engineering to secure funding for research.

4

Venture philanthropy

There is a trend for non-profit organizations (NGOs) to fund research in certain areas, providing 'quick cash' to hot issue research projects.



10

Top research trends

5

Academic research

There is an evergrowing need for academic researchers to be able to reproduce positive results.

6

Data standards

There is a growing push to develop international standards.



11

Top research trends

7

Turning outputs into outcomes

Reducing the gap between the approval for research and its adoption into use.

8

Collaboration among stakeholders

Collaboration among R&D stakeholders (government, academia, industry, non-profits) is required to make progress in increasingly complex scientific and business environment.



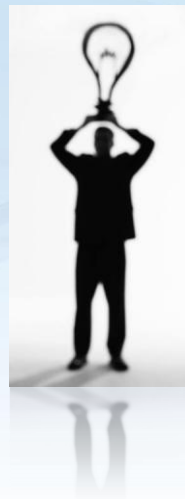
12

Top research trends

9

Innovation

Though there's no shortage of brilliant scientists and discoveries in medical research, it is notoriously hard to move them forward in the expensive environments of academia and industry, where risk is not necessarily rewarded



13

More money more people

- Global spending on research and development (R&D), totaling US\$1.1 trillion in 2007, double that in 1996
- Between 2000 and 2010, the number of science and engineering graduate students rose 30%, and number of postdocs increased 45%
- 24,000+ peer reviewed journals, 2000+ publishers, 1.5 million+ papers published per year, 3 million+ papers submitted per year: increased 44% since 2001



14

14

Why?



You must publish in English

- International language of academics
- Become an effective communicator
- Funding
- International reputation
- Advance your career

15

PREPARATION



16

Where?



17

How?



Find and follow the author guidelines for the journal or conference

- Instructions for authors
- Sample articles
- Style Manual

<http://pubs.acs.org/page/4authors/index.html>

18

[Home](#)
[Journal Publishing](#)
[Book Publishing](#)
[Benefits & Services](#)

ACS Publications

Participating in CrossCheck
Committed to Detering Plagiarism

Powered by iThenticate depositor

Quick Links for Authors & Reviewers

| | |
|---|---|
| ACS ChemWork English Editing Service The ACS Style Guide Overview of ACS Publishing Publishing Tools | Ethical Guidelines Copyright & Permissions/RightLink Publishing Policies NEW! Spring 2014 ACS Excellence |
|---|---|

ACS Author Benefits

4 New Ways ACS is Open
Open access publishing options—a new open access journal, more licensing choices for authors, a stimulus program to support authors who select ACS journals when seeking to publish their work open access. [More »](#)

Author Facilitated Open Access

- ACS AuthorChoice offers unrestricted Web access for a low, one-time fee.
- Information about Compliance with Funder Open Access Policies

ACS Articles on Request
ACS Articles on Request provides for 50 free e-prints of your journal article. [More »](#)

Thank You from ACS Editors
Thank you from ACS Editors for your exceptional service as an author and reviewer. [More »](#)

Publishing with ACS

How to Publish in ACS Journals

- [Quick Guide to Manuscript Submission for ACS Journals \[PDF\]](#)
- [How to Submit a Manuscript](#)
- [Publishing Your Research 101 Video Series](#)

ACS on Campus
Seminars to help new authors navigate manuscript submission and peer review. [More »](#)

ACS Journal Publishing Agreement and ACS Books Copyright
Forms and instructions for the ACS Journal Publishing Agreement, ACS Books Copyright, and permission for material published by ACS. [More »](#)

Preparing a manuscript

Originality

- Research should be relevant—in time and content

Technical Quality

- Research question should be clearly communicated
- Study design should be technically sound
- Results should be verifiable and conclusive
- Relevant literature should be appropriately cited.
- Drawbacks, disadvantages or limitations of the study should be discussed or listed



19

Reasons for manuscript rejection

Presentation

- Language should be grammatically correct, concise, and comprehensible.
- Findings should be presented in the best possible format
- Headings, subheadings, and figure and table legends should be accurate and informative, yet concise.

Authors should ensure that the time and effort invested in designing, planning, executing, and completing the study are supplemented with a proportional effort in presenting the results.



20

Submission process

Most journals follow a 4-step recommendation process:

- Accept without any revision(s)
- Accept with revision(s)
- Reject, but recommend submission to another journal, with or without revision(s)
- Reject outright (manuscript is deemed unfit for publication)



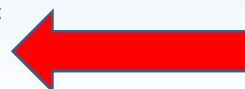
21

Reasons for manuscript rejection

MOST

LEAST

1. Research questions lack novelty and/or research is of insufficient international importance or interest.
2. Research is redundant
3. Research methodology/study design is biased or flawed. Suspected misconduct: duplicate submission, plagiarism, or fabrication of data
4. Data is incomplete, inadequate, or incorrect
5. Study objective is not well-addressed or the conclusion is improper
6. Authorship conflict
7. Research topic does not align with the journal's mission statement or objective
8. Competing manuscript on a similar topic
9. Poor language or presentation of results



22

Overcoming manuscript rejection

To ensure resubmission and acceptance

- Recheck the manuscript for any missing information
- Reply to each referee's comments, stating which changes were made and why
- If manuscript is a translation, inform the editor and offer to get it retranslated

If an author is convinced that the reasons for rejection are unwarranted, adopt one of the following measures:

- Request the editor/referee to indicate remedial measures or provide constructive feedback
- Check referee's qualifications with journal editor
- Check if referee has any competing interests

23

Cover letter

- Standard business letter format (Purpose, Background Action)
- Clear importance of topic
- Statement to confirm no conflicts: multiple submissions, ethics, specific IRB guidelines followed, etc.

23 Aug 2013

Sang Baek Ko
Professor of Occupational and Environmental Medicine
at Yonsei University Wonju College of Medicine.
Chief Editor of
Annals of Occupational and Environmental Medicine

Dear Dr Ko

I, along with my coauthors, would like to ask you to consider the attached manuscript entitled "Subclinical interstitial lung damage in workers exposed to indium compounds" for publication in *[Annals of Occupational and Environmental Medicine]* as an original manuscript.

This study was aimed at ascertaining the relationship between exposure to indium compounds and interstitial lung damage in workers employed at indium tin oxide manufacturing and reclaiming factories in Korea. We found that interstitial lung changes could be present in workers with a range of serum indium levels, i.e., in those with relatively low levels as well as those with high levels of serum indium. To our knowledge, this is the first investigation of indium induced interstitial lung disease in Korea, and our results are meaningful as an initial step in the identification and prevention of indium lung disease in Korea. We believe that the findings of this study are relevant to the scope of your journal and will be of interest to its readership.

This manuscript has not been published or presented elsewhere in part or in entirety, and is not under consideration by another journal. All study participants provided informed consent, and the study design was approved by the appropriate ethics review boards. All the authors have approved the manuscript and agree with submission to your esteemed journal. There are no conflicts of interest to declare.

Thank you for your consideration. I look forward to hearing from you.

Sincerely,

Hyoungryoul Kim

Associate Professor, M.D., Ph.D.
Dept. of Occupational and Environmental Medicine,
College of Medicine, The Catholic University of Korea

24

Paper Organization

25

HOCs and LOCs

Higher Order Concerns

- Focus
- Audience
- Purpose
- Organization
- Development

Lower Order Concerns

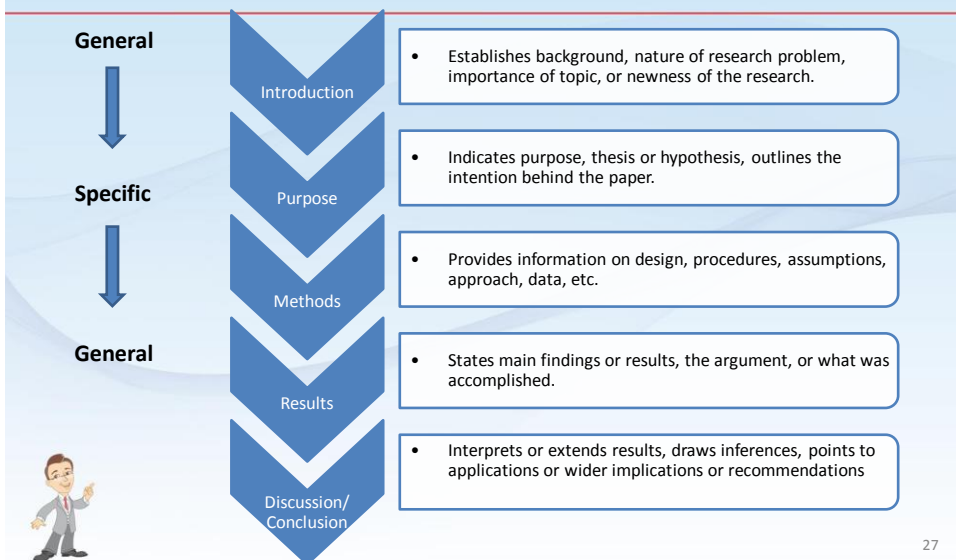
- Language
- Spelling
- Word Choice
- Punctuation
- Sentence structure
(in larger writing)



Purdue Online Writing Lab

26

Parts of a journal article



Main parts of the Introduction



General phases within an Introduction

1. Establish an area to research by:

- Highlighting the importance of the topic, and/or
- Making general statements about the topic, and/or
- Presenting an overview on current research on the subject, and/or
- Defining key terms.

2. Identify a research niche by:

- Opposing an existing assumption, and/or
- Revealing a gap in existing research, and/or
- Formulating a research question or problem, and/or
- Continuing a disciplinary tradition.

3. Place your research within the research niche by:

- Stating the intent of your study,
- Outlining the key characteristics/differences of your study, and/or
- Introducing basic methodology used, and/or
- Describing important results, and/or
- Giving a brief overview of the structure of the paper.



29

Key Considerations

Your introduction should clearly identify the subject area of interest

Establish context by providing a brief and balanced review of the pertinent published literature

Clearly state the hypothesis that you investigated

Why did you choose this kind of research study or design?



30

Writing your Literature Review

Use Evidence

A literature review is just like any other academic research paper.

Be Selective

Select only most important points to highlight in the review.

Use Quotes Sparingly

Do not use extensive quotes as a substitute for your own summary and interpretation of the literature.

Summarize and Synthesize

Remember to summarize and synthesize your sources within each paragraph as well as throughout the review.

Keep Your Own Voice

The writer's voice should remain clear.

Use Caution When Paraphrasing

Be sure to represent the author's information or opinions accurately and in your own words.

31

Getting organized

Literature review matrix:

<http://www.scotland.gov.uk/Publications/2004/08/19843/42012>

Highlight text copied from the article in a different color

Rephrase/paraphrase notes

Consider how all the studies fit together



| RESEARCH LITERATURE REVIEW ON PRESCRIBING | | | | | |
|---|---|--|--|--|---|
| ANNEX FOUR: EVALUATION MATRIX OF STUDIES INCLUDED IN THE REVIEW | | | | | |
| Study | Focus | Methodology & Methods | Intervention | Results | Conclusion/limitations |
| Boreham et al (2000) *C1 | Doctor prescribing Basic training for medical students in pharmacotherapeutics. | Quantitative Random stratified sample of 32 students given a prescribing exercise to adjust doses of phenytoin sodium. The answers were recorded and transcribed. | Analysis of errors made by 16 final year students in a classroom exercise. | 16 non-optimal dose recommendations were made (50% of students). 10 students made recommendations causing adverse drug effects, classed as major errors. 6 recommended a sub-optimal dose not classed as major. | Findings support the integration of theory and practice and suggest problem based learning Limitations: Small, single centre study |
| Britten et al (2003) *B3 | Doctor prescribing Appropriateness of GP prescribing and development of a measure. | Qualitative and quantitative 24 practices and 186 patients. Questionnaire to patients and GPs before and after the consultation. Data from patient records and interviews. Outcome measures: unwanted, unnecessary and pharmacologically inappropriate prescriptions. | None | Before the consultation 42% patients wanted or expected a prescription. 65% resulted in a prescription. Of 92 independent assessments of these prescriptions, 4% were judged inappropriate and in 19 cases assessors were uncertain. | Measuring appropriateness of prescriptions was feasible and offered valuable insights to prescribing and patient behaviour. Limitations: Small study when investigating rare events. GPs not necessarily representative. |

Common technology tools:

- EndNote: <http://endnote.com/>
- Zotero: <http://www.zotero.org/>
- Mendeley: <http://www.mendeley.com/>

32

Verb tenses in Introduction sections

Present tense: A fact or a practice that is generally accepted in the field.

Past tense: Results of individual experimental papers. Finished events in the past with a specific time.

Present perfect tense: (have + PP) Summary of generalization about research in the field or general trends in society. No specific time or date.

Present continuous/passive tense: An ongoing situation that is currently developing (... is being developed, etc.)



33

Step 1: Establish the research area

The cumulative effects of environment pollution on climate change and ecological deterioration **are growing** prominent.

The delta function **has played** an enormous role in the development and advancement of quantum mechanics **since** its introduction by Dirac [1].



General statements are key here.

34

Step 2: Identify a research problem

Many Chinese researchers **have studied** the EKC hypothesis with time series data (Zhang, 1999; Zhao, 2005; Song et al., 2007; Chen et al., 2009; Peng, 2006; Ling et al., 2001). Their findings **are inconclusive and sometimes contradictory**.

However, the evaluation of the coefficient B (often called U_0 in literature) is **not obvious** and **has been** the **subject of some disagreement** [8–11].



This is the 'however' statement.

35

Step 3: Your paper becomes the solution

Our purpose in this paper is to present a unified picture of how by letting the range of the square well approach zero in one, two, and three dimensions, one **may deduce** the bound-state structure in the delta function limit.

In order to explore the interactions and feedback between environment quality and economic growth and measure the time lag between them, **this paper builds** several models on the basis of time series data analyses and **carries out** a comprehensive study of the relationship between industrial pollution and economic factors.



Other key phrases include 'here' or 'in this study'.

36

Methods Structure

Key elements

- Description of participants (as needed)
- Overview of materials
- Discussion of design elements
- Discussion of procedures used



37

Purpose of the Methods section

- Reader needs to understand experimental procedures
- Include enough detail so readers can understand experiments
- Include a description of statistical methods employed in the study
- Provide a more detailed version of procedures Supplemental Data (as needed)
- Mention who approved the study (as needed)
- Provide statement of funding source and Institutional Review Board (IRB) guidelines followed (as needed)



38

Condensed and extended Methods sections

| Variation in Methods Sections | |
|--|--|
| Condensed | Extended |
| Tends to describe familiar, standard methods | Tends to describe new or unusual methods |
| No named subsections | Provides background information |
| Uses abbreviations and citations as shorthand | Uses longer descriptions |
| Running series of verbs (e.g. "collected, stained and stored") | Usually one finite (main) verb per clause |
| Few "by + verb-ing" statements (explaining "how") | Several "how" statements |
| Few definitions and examples | Few definitions and examples |
| Few justifications (explaining "why") | Several justifications ("in order to ...") |
| Few linking phrases | Wide range of linking phrases |



Adapted from Swales JM, Feak CB. Academic Writing for Graduate Students, 2nd ed. Ann Arbor: U of Michigan; 2004.

39

Expressions of Time/Sequence

1. **Then/Next** , we combined the two mixtures.
2. We **then/next** combined the two mixtures.

1. **Also**, idiosyncrasies in the history of a population can leave marks on the gene pool.
2. Idiosyncrasies in the history of a population can **also** leave marks on the gene pool.

When cells "burn" glucose at low temperatures, the glucose is **first** oxidized to pyruvate in **10 steps**, releasing small amounts of energy at **each step**. **Next**, pyruvate is oxidized in most eukaryotic cells to CO₂ and water, **which takes 9 more steps**. The electron transport system **then** traps energy in ATP bonds. **In this process**, the products of the biological oxidation reaction (CO₂ and water) are **the same as** those obtained by high temperature burning, **but** much of the energy is trapped in the ATP bonds.

40

Example phrases

Categorical variables **were analyzed** using the χ^2 or Fisher's exact test. *P* values < 0.05 **were considered** significant; all *P* values **were based** on two-sided tests.

We excluded rural, pediatric, specialty, or long-term care facilities or hospitals that were in the process of closing or merging with another facility.

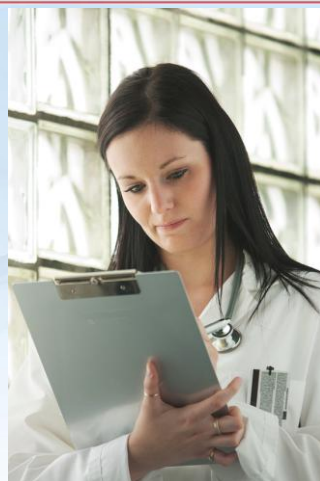
The Johns Hopkins University School of Medicine Institutional Review Board approved our research protocol.



41

Purpose of the Results section

- Provide a brief synopsis of key findings
- Discuss possible explanations for the findings
- Compare study results with relevant published findings
- Use tables and figures when possible



Annals of Internal Medicine
Established in 1927 by the American College of Physicians

Annals of Internal Medicine
<http://www.annals.org/>

42

Data Commentary

Example:

As shown in Figure 1, the father and son both attempt to access the TV service, while the mother wants to access the music player. Now, consider the situation that arises when the father is the first user of the TV service. The TV service recognizes the preferred programs of both the father and son, and if the TV service has a first-come-first-served (FCFS) policy, it would then select the father's program; otherwise, it would select a sitcom as the son's preferred program. Consequently, whatever TV service is selected, neither user is satisfied. The situation gets further complicated when the mother wants to listen to music. In this case, the TV service may not be delivered to the father and son due to the music played by the music player. Based on this example, it can be clearly seen that a conflict management method has to deal with service conflicts not only among users wanting access to the same media service, but also among users who want to access different media services in a shared space.

Location statement

Highlighting statement

Interpretation/Implication

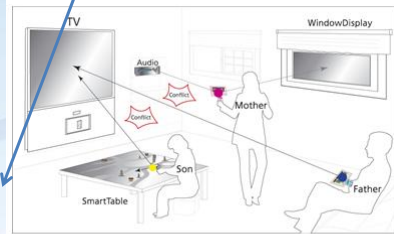


Fig. 1. Example of service conflict.

43

Location Statements

Indicative (passive and active)

- Figure 2 illustrates the conflict resolution of the previous service based on the proposed conflict management method.
- This overall decay can be further decomposed into ..., as shown in Fig. 2.

Informative (active)

- This effect is most clear in Fig. 3B, where
- Fig. 3B clearly shows that the b_0 values increase as

Informative (using '()')

- Having dried in a vacuum oven at 80 °C for 24 h, complete CNT sheets (Figure 1) were obtained.



44

Example phrases

In the adjusted multivariable model, several of these associations **persisted** (Tables 2 and 3). Teaching hospitals **had** higher CIT scores (4.6 points higher, $p = 0.002$) than nonteaching hospitals.

We found no relationship between the normalized IT expenditure variables and CITAT scores, **indicating that** positive associations in the original analysis (in particular, higher automation scores associated with higher IT expenditures) **diminished** after accounting for bed size.



45

Discussion structure

Suggested structure for discussion of scientific papers

- Statement of principal findings
- Strengths and weaknesses of the study
- Strengths and weaknesses in relation to other studies, discussing particularly any differences in results
- Meaning of the study: possible mechanisms and implications for clinicians or policymakers
- Unanswered questions and future research



46

Content of the Discussion section

Explanation of results: comment on whether or not the results were expected and present explanations for the results; go into greater depth when explaining findings that were unexpected or especially profound

References to previous research: compare your results with the findings from other studies, or use the studies to support a claim

Deduction: a claim for how the results can be applied more generally

Hypothesis: a more general claim or possible conclusion arising from the results [which may be proved or disproved in subsequent research]



47

Showing certainty about results

Basic claim: An increase in smoking among teenagers **caused** long-term health problems.

Stronger claim: **Based on these results**, it has become clear that an increase in teen smoking **must have caused** long-term health problems.

Limited claim: **We have reason to believe that** the increase in teen **smoking may have been one source** of long-term health problems in adults.



48

Example phrases

The analyses above show that controlling the amount of industrial pollution **will not slow down** economic growth **but accelerate** the growth of per capita GDP. These effects can usually be seen within two years but they will diminish very quickly. Therefore it is **unnecessary** to worry about the negative effects of environment regulations on economic growth.

In the present investigation, a **significantly higher number** of successful physician recruiters than unsuccessful physician recruiters **considered** the support system with CRC as the reason for their participation in the trial (Table 2).



49

Example phrases

Since **less than half** of the respondents had past experience in patient enrollment, unsuccessful physician recruiters were **ill-prepared** for practical procedures, such as participant estimation and obtaining informed consent in the clinical trial.

Perhaps more important than the age of the building is the newness of its technological infra-structure. The latter **may not** necessarily correlate with the building age, though it **could be** captured in the age of plant variable and **may explain the findings we observed**.



50

Writing the Conclusion

- Restate your topic and why it is important
- Restate your thesis/claim
- Address opposing viewpoints and explain why readers should align with your position
- Call for action or overview future research possibilities.

The conclusion provides a place for you to persuasively and succinctly restate your research problem, given that the reader has now been presented with all information about the topic.



51

Example Phrases

The Thomas result was obtained variationally as an upper bound, and it referred only to the ground state, **whereas our present treatment** covers all the bound states.

Further studies, using a variety of methods, **should examine** what organizational factors, such as policies, norms, and cultures, could explain these relationships.

Because of the various study limitations, **further study is warranted** to determine the generalizability of the present findings to other areas and to international settings.



52

Abstract Format (Structured)

View of physicians on and barriers to patient enrollment in a multicenter clinical trial: experience in a Japanese rural area

Hiroaki Yanagawa¹, Masatoshi Kishiku¹, Masashi Akaie², Hiroyuki Azuma² and Minoru Irahara¹

Abstract

Background: Clinical trials in the general practice setting are important for providing evidence on the effectiveness and safety of different agents under various conditions. In conducting these trials, the participation of physicians and patient recruitment are important issues. Various investigations in the literature have reported views and attitudes of physicians on various types of clinical trials. Nevertheless, there is still little information concerning physicians participating in a clinical trial and among them, those who could not recruit any patients (unsuccessful physician recruiters).

Methods: In 2003, we collaborated in a large-scale multicenter study of Japanese hypertensive patients (COPE Trial). In Tokushima University Hospital and 18 other medical institutions, we investigated the views and attitudes of unsuccessful physician recruiters in comparison with successful physician recruiters, using a questionnaire.

Results: The questionnaire was provided by mail to 47 physicians and 27 (57%) responded. The response rate was 79% for successful physician recruiters compared to 43% ($P = 0.014$) for unsuccessful physician recruiters. More successful physician recruiters (73%) than unsuccessful physician recruiters (42%) stated they had participated and enrolled patients in previous multicenter clinical trials. A significantly higher number of successful physician recruiters than unsuccessful physician recruiters (42%; $P = 0.040$) considered the presence of a support system with clinical research coordinators (CRC) as the reason for participation (80%). A large number of unsuccessful physician recruiters experienced difficulty in obtaining informed consent (67%), whereas a significantly smaller number of successful physician recruiters experienced such difficulty (20%; $P = 0.014$). The difficulties experienced by unsuccessful physician recruiters in the trial were as follows: inability to find possible participants (100%), difficulty in obtaining informed consent (58%), cumbersome procedures (58%), difficulty in long-term follow up (33%), and insufficient tools for explanation and obtaining informed consent (8%).

Conclusion: This survey showed that successful physician recruiters consider a support system with CRC of value, and that they are skillful in obtaining informed consent. These views and attitudes may have originated from past experience involving clinical trials. In this regard, we need to develop an infrastructure to enlighten physicians on this support system for the promotion of clinical trials.

- Defined sections
- Full coverage of paper
- Easy for reader to understand

53

Abstract Format (Unstructured)

The Interplay and Feedback Mechanism between Environmental Pollution and Economic Growth in China

Zhaogang Wang

Abstract

China's rapid economic growth has given rise to serious clashes with environment protection needs. In order to address the dilemma between environment protection and economic growth, a thorough investigation into the relationship between the two is fundamental to the formulation and implementation of environment policies. This paper uses econometric analyses of time-series data on industrial pollution and GDP per capita between 1980 and 2008, examines the long-term dynamic equilibrium and interplay between environment quality and per capita income in China, and obtains the following points. First, there is cointegration between economic growth and environment pollution in China. Second, the increase of per capita GDP has evident lag effects on environment quality. Third, the simulated structure of Generalized Impulse Response Function shows that the responses of environment quality indicators to the impulse of per capita growth rate are mostly fluctuant. Fourth, the results of variance decomposition show that the contribution of pollution indicators to the variance decomposition of GDP per capita is relatively small.

- Paragraph (usually one)
- No clear structure
- Need to ensure enough information given

54

Structure and content of Abstracts

Common mistakes

- Hold back significant points or information
- Lack of balanced coverage
- Include references such as (Kim et al., 2000) or [1] or ¹ in the abstract
- Include paragraphs
- Length
- Use same sentence for the first line of the abstract and the first line of the Introduction



55

Title



Basic tips for writing titles:

- Drop article (a/an/the) if it is the first word of the title
- Avoid expressions such as 'an investigation of' or 'research on'

Basic rules for formatting a title:

- Capitalize all words (as needed)
- Title should not be a complete sentence



56



ETHICAL CONCERNS IN WRITING

57

In the News

About 30 retractions in 2000 to over 400 retractions in 2011

Scientific fraud: 67% of 2000 retractions in Pubmed were due to misconduct

- 43% due to fraud
- 14% due to duplication publication
- 10% due to plagiarism

Possible reasons:

- Increased competition for funds
- Grants becoming a metric for research assessment
- Strong publication record = large publication record
- Journal emphasis on novel and exciting results
- Inadequate checks



58

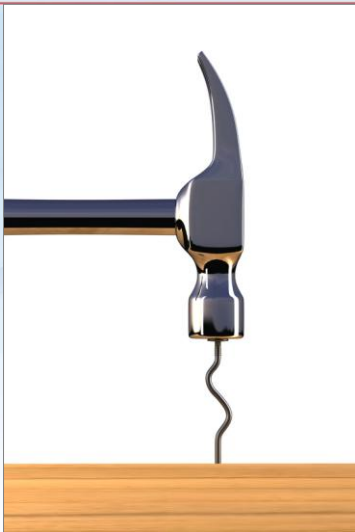
Ethical concerns (Misconduct)

Research misconduct

- Fabrication
- Falsification
- Unethical research

Publication misconduct

- Plagiarism
- Biased/selective reporting
- Authorship abuse
- Redundant publication
- Reviewer misconduct
- Abuse of position



59

Duties

| Duties of Editors | Duties of Reviewers | Duties of Authors |
|---|--|--|
| <ul style="list-style-type: none"> • Publication decision • Fair play • Confidentiality • Disclosure and Conflicts of interest • Involvement and cooperation in investigations | <ul style="list-style-type: none"> • Contribution to Editorial Decision • Promptness • Confidentiality • Standards of Objectivity • Acknowledgement of Source • Disclosure and Conflicts of Interest | <ul style="list-style-type: none"> • Reporting standards • Data Access and Retention • Originality and Plagiarism • Multiple, Redundant or Concurrent Publications • Acknowledgement of Sources • Authorship of the Paper • Hazards and Human or Animal Subjects • Disclosure and Conflicts of Interest • Fundamental errors in published works |



http://www.elsevier.org

60

Differences in using source material

| | |
|--------------|---|
| Quotations | Quotations must be identical to the original, using a narrow segment of the source. They must match the source document word for word and must be attributed to the original author. |
| Paraphrasing | Paraphrasing involves putting a passage from source material into your own words. A paraphrase must also be attributed to the original source. Paraphrased material is usually shorter than the original passage, taking a somewhat broader segment of the source and condensing it slightly. |
| Summarizing | Summarizing involves putting the main idea(s) into your own words, including only the main point(s). Once again, it is necessary to attribute summarized ideas to the original source. Summaries are significantly shorter than the original and take a broad overview of the source material. |

61

Paraphrasing concerns

| Original text | Unacceptable paraphrasing |
|--|---|
| <p>Few laboratory creatures have had such a spectacularly successful and productive history as <i>Drosophila</i>. It first entered laboratories about 1900, revealed its talent for experimental genetics to Thomas Hunt Morgan and his students at Columbia University in the early 1910s, and after some ups and downs in status is still going strong almost a century later.</p> <p>(from Kohler, R.E. 1994. <i>The Lords of the Fly</i>. The University of Chicago Press, 321 pages.)</p> | <p>Despite some ups and downs in status, nearly a century after the fly revealed its talent to Thomas Hunt Morgan and his students, <i>Drosophila</i> genetics research continues its spectacularly successful history (Kohler, 1994).</p> <div>Non-content words must be changed</div> |

From: <http://www.bio.davidson.edu/dept/plagiarism.html>

62

Paraphrasing concerns

| Original text | Unacceptable paraphrasing |
|--|---|
| <p>Few laboratory creatures have had such a spectacularly successful and productive history as <i>Drosophila</i>. It first entered laboratories about 1900, revealed its talent for experimental genetics to Thomas Hunt Morgan and his students at Columbia University in the early 1910s, and after some ups and downs in status is still going strong almost a century later.</p> <p>(from Kohler, R.E. 1994. <i>The Lords of the Fly</i>. The University of Chicago Press, 321 pages.)</p> | <p><i>Drosophila</i> is model organism with a rich and useful legacy. Upon arriving on the scene at the turn of the century, the fruit fly soon became the organism of choice for Thomas Hunt Morgan and his Columbia University pupils. Despite fluctuations in status, fly research is still central to the progress of genetics (Kohler, 1994).</p> <div> <p>The structure of the original text must also be changed</p> </div> |

63

Paraphrasing concerns

| Original text | Acceptable paraphrasing |
|--|--|
| <p>Few laboratory creatures have had such a spectacularly successful and productive history as <i>Drosophila</i>. It first entered laboratories about 1900, revealed its talent for experimental genetics to Thomas Hunt Morgan and his students at Columbia University in the early 1910s, and after some ups and downs in status is still going strong almost a century later.</p> <p>(from Kohler, R.E. 1994. <i>The Lords of the Fly</i>. The University of Chicago Press, 321 pages.)</p> | <p>Thomas Hunt Morgan and colleagues at Columbia University were among the first to use the fruit fly <i>Drosophila</i> as a model organism, adopting it as an experimental system around 1910. Since then, the popularity of the fly has waxed and waned somewhat, but the breadth and depth of current research indicates that <i>Drosophila</i> continues its legacy as an incredibly important research tool (Kohler, 1994).</p> |

Both the non-content vocabulary and structure of the original text must be changed

64

Danger signs

- Uneven style or quality of writing
- Mixture of UK and US spelling
- Inconsistent terminology / abbreviations
- Repetitiveness or excessive detail
- Lack of cohesion between sentences or paragraphs



65

Plagiarism detection



<http://www.crossref.org/crosscheck/index.html>

Used by journals; no public access



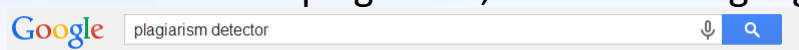
<http://www.ithenticate.com/>

Open to all (for a fee)



<http://www.grammarly.com/plagiarism-checker/>

Checks for language as well as plagiarism; useful for language



66



GENERAL LANGUAGE SHIFT FOR ACADEMIC WRITING

67

Plain English

Research writing commonly
requires large words

Need to avoid using extra (large)
words and jargon

Keep text as simple as possible



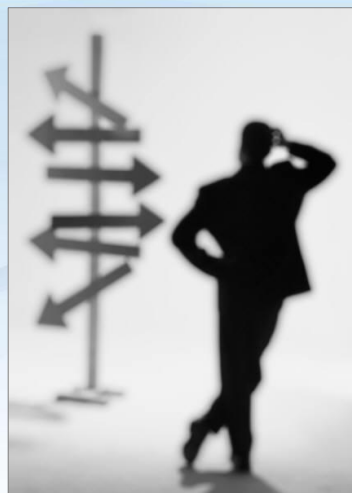
68

Structure of English language (writing)

English is 'top-loaded'

Key points are stated:

- early in paragraph
 - early sentence
- then explained further



69

Big Words

| | |
|--------------|---------------------|
| amorphous | shapeless |
| ascertain | determine |
| cessation | stop/pause |
| coagulation | clotting/thickening |
| miniscule | tiny |
| nomenclature | system of names |
| orientate | orient |
| terminate | end |

70

Wordy Phrases

| | |
|------------------------------|--------------------|
| during the course of | during |
| exhibits the ability | can |
| has proved itself to be | has proved, is |
| inasmuch as | since |
| in the event that | if |
| in the majority of instances | usually, generally |
| on a daily basis | daily |
| until such time as | until |

71

Redundancies

| | |
|------------------------|--------------|
| absolutely essential | essential |
| actual experience | experience |
| combine into one | combine |
| cubic meters in volume | cubic meters |
| current status | status |
| different varieties | varieties |
| final outcome | outcome |
| past history | history |
| triangular in shape | triangular |

72

Example

- **Physician counsel** can be a **powerful influence** on safe injection practices.
- **Advice from doctors** is often seen as a **key factor for improving** safe injection practices.



73

Example

- Studies of **barriers to implementation** of preventive services have concluded that
- **Barriers to the implementation** of preventive services have included
- The **practical implementation** of preventive services **has been blocked** by



DIFFICULT



EASIER



74

Example

- Opinion leaders **were used to establish** a communications channel into the existing regional physician social network
- Opinion leaders **established** a communications channel in the existing regional physician social network



75

Example



Poor

In this survey, both residents and investigators **were very patient**, and the National Bureau of Statistics **approved** that the quality of data was high.



Better

In this survey, both residents and investigators **were methodical**, and the National Bureau of Statistics **confirmed** that the quality of data was high.



76

Only use passive voice when needed

X

Data were collected from 5000 patients by **the physician**.

O

The physician **collected data** from 5000 patients.

X

Vasoconstriction and increased VSM cell $[Ca^{2+}]$ were elicited by the addition of KCl in both groups.

O

The addition of KCl elicited **vasoconstriction and increased VSM cell $[Ca^{2+}]$** in both groups.



77

Active and Passive Voice Verbs

Form of the active and passive voice

Active voice puts the person or thing doing the action in the subject ("power") position.

Examples:

1. The researchers obtained the Thomas result variationally as an upper bound.

The passive voice changes the word order.

The object (Thomas result) becomes the subject.

2. The Thomas result was obtained variationally as an upper bound by the researchers.
3. The Thomas result was obtained variationally as an upper bound.



Mentioning the actor (researchers) becomes optional.

78

Quiz: Choose the correct verb

1. Therefore, the methodology of the generalized impulse response function **developed** / **was developed** in order to carry out meaningful analyses on VAR models.
2. To investigate the role of oligomers in NM amyloid formation and growth, the researchers **explored** / **were explored** the relationship between monomer concentration and polymerization progress.



79

Article use: A / An / The / ø

A/An:

- First mention of a countable noun
- 'A' used before consonant sound
- 'An' used before vowel sound

No article (ø)

- First mention of uncountable or plural noun



The

- Second mention of a noun
The first studies were conducted ...
- Before a superlative or ordinal number
The only research previously done in this area ...
- Before a specifier
The stars are fueled by fusion reactions.



- Of-phrases or other forms of post-modification
The behavior of this species varies.
- Partitive of-phrases with plurals
Some of the subjects had adverse reactions.
- Names of theories, effects, devices, scales
the Heisenberg uncertainty principle
- **No article is used**
Coulomb's law

81

Article Use in Academic Writing

As _____ average population of _____ United States has increased, so too has _____ number of _____ hearing impaired individuals. Approximately _____ 20 million hearing aids are now in use, and this number is expected to rise. _____ Although there have been considerable advances in hearing aid technology, they still have _____ number of drawbacks, one of _____ most notable ones being problems in dealing with _____ important environmental sounds. For example, _____ people who are deaf in both ears are unable to determine _____ direction of a sound when using _____ conventional hearing aid. This limitation could result in _____ accident or injury if the wearer cannot determine _____ direction of _____ siren or other warning sound. Another problem concerns _____ people suffering from _____ high-frequency hearing loss. This type of hearing loss removes many consonants and _____ other useful environmental noises, such as _____ ringing of _____ telephone.

82

Choosing appropriate words

Renal blood flow was drastically compromised when the aorta was obstructed.

→

Animals were studied 4-6 weeks later.

→

The salicylate are rapidly absorbed with a peak plasma concentration within 2 h.

→

After 4 h of hemodialysis, we abruptly ended the hemodialysis procedure.

→

83

Choosing appropriate words

Oxygen uptake in response to drugs was examined and found to vary considerably.

→

The response was blocked by phentolamine but was not **(affected, effected)** by propranolol.

→

The digoxin **(amount, concentration, content, level)** was increased from 0.5 ng/ml to 2.5 ng/ml.

→

Preganglionic stimulation **(enhances, increases)** norepinephrine release from terminal within the superior cervical ganglion.

→

84

Style Concerns

Improper appearance

Not following guidelines

Differences between English and Korean



That can lead to immediate rejection of your paper

85

Reference formats

AUTHOR-DATE

Example

1. Berge et al. (1976), Theus and Chou (1983), Ruud et al. (1990, 1993) examined stress corrosion cracking and measured the residual stresses for the integrity of S/G tubes.
2. The use of a strong seed source is known to efficiently reduce the AOPF to below an initial background level (Park et al., 2004).

NUMBER STYLE

Example

One of the most popular models used in information retrieval is the vector model [1], [10], [11].

SUPERSCRIPED

Example

Nucleic acids provide a unique material for constructing molecular devices.¹

86

Abbreviations

Do not **introduce** abbreviations

- for **words that are only used once**
- in **subheadings**
- in **keywords**

Example

1. A method for improving the performance of a non-native **automatic speech recognition (ASR)** system.
2. Research pertaining to **nanoscale zero-valent iron (NZVI)** is continually attractive.

Contractions:

Remember: Don't use don't!

87

Using equations

Equations follow normal sentence grammar. The equals sign = is a verb. Sentences that end with an equation should have a period like any other type of sentence.

1. In practice, the fractal dimension is calculated using recursive different box sizes, such that

$$D_f = \lim_{\delta \rightarrow 0} - \frac{1}{\ln \delta} \frac{\ln N(\delta)}{\ln \delta}. \quad (12)$$

2. The corresponding equations of motion can be expressed as follows:

$$m_p \ddot{X} + c \ddot{X}_p + k X_p = F_0 \sin(\omega t) \quad (1)$$

$$m_a \ddot{X}_a = 0 \quad (2)$$



where over-dots refer to the differentiation with respect to time, and subscripts "a" and "p" represent physical values of the primary and auxiliary masses, respectively.

88

SENTENCE WRITING



89

Sentence structures

SIMPLE

Main clause

Primary care settings have become the de facto settings for the treatment of many mental health conditions.

COMPOUND

Main clause + Main clause

Study protocols were developed, reviewed, and approved by the institutional review boards at both sites, and all participants gave written informed consent.

COMPLEX

Main clause + Subordinate clause

While the balancing of competing demands has previously been cited as a reason for physicians not exploring depressive symptoms and diagnosis during a clinic visits [44,45], the number of chronic medical conditions did not affect physician diagnosis of depression in this study.

COMPOUND-COMPLEX

Main clause + Main clause + Subordinate clause

90

Sentence Writing

Simple Sentence: has one independent clause

- Freshwater boils at 100° Celsius at sea level.
- Freshwater boils at 100° Celsius and freezes at 0° Celsius.
- Freshwater and saltwater do not boil at the same temperatures.
- Freshwater and saltwater do not boil and do not freeze at the same temperatures.



91

Simple Sentences Practice

Write 2 simple sentences with:

- 1 subject and 1 verb
- 1 subject and 2 verbs
- 2 subjects and 1 verb
- 2 subjects and 2 verbs



92

Sentence Writing

Compound Sentences: two or more independent clauses joined together

1) With a coordinator ('FAN BOYS')

Saltwater boils at a higher temperature than freshwater, **so** food cooks faster in saltwater.

2) With a conjunctive adverb

Saltwater boils at a higher temperature than freshwater; **therefore**, food cooks faster in saltwater.

3) With a semicolon

Saltwater boils at a higher temperature than freshwater; food cooks faster in saltwater.



93

Making Compound Sentences

, coordinator ('FANBOYS')

, for
, and
, nor
, but
, or
, yet
, so

; conjunctive adverb,

; accordingly, ; instead,
; consequently, ; moreover,
; for example, ; nevertheless,
; furthermore, ; on the other hand,
; hence, ; otherwise,
; however, ; then,
; in addition, ; therefore,
; in contrast, ; thus,
; in fact,
; indeed,



94

Compound Sentences Practice

Write compound sentences using:

- Each coordinator ('FAN BOYS') once
- A semicolon (;) + 5 different conjunctive adverbs
- Only a semicolon (;)



95

Sentence Writing

Complex Sentences: contain one independent clause and one (or more) dependent clause(s)

With adverb clauses (when, while, because, although, if, so, that)

Although women in the US could own property, they could not vote until 1920.

With adjective clauses (who, whom, which, whose, that; or relative adverb where, when)

Last year we vacationed in Cozumel, which features excellent scuba diving.



With noun clauses (*wh*-question word, that, whether, if)

That there is a hole in the ozone layer of the Earth's atmosphere is well known, scientists know what caused it.

96

Complex Sentences Practice

Write 6 complex sentences



97

Grammar

A compound-complex sentence has at least three clauses, at least two of which are independent.

Information and communication technology is reaching out to help people in the poorest countries improve their lives; **for example**, fishermen on the Bay of Bengal can now receive online weather reports **that tell them when it is safe to go out.**

The worldwide reach of the Internet is also providing employment opportunities in developing countries, **and as greater numbers of people learn the technology these opportunities will expand.**



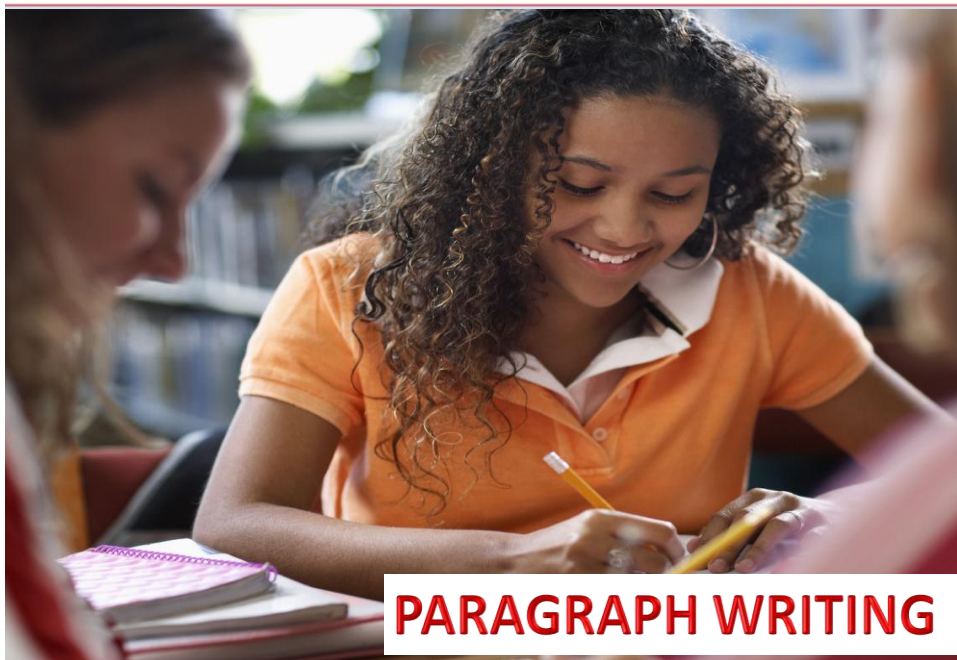
98

Compound-Complex Sentences Practice

Write 4 compound-complex sentences



99



PARAGRAPH WRITING

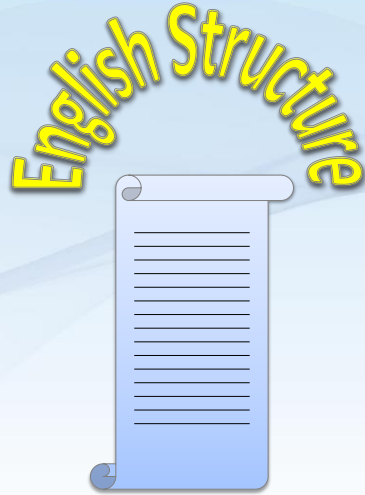
Structure of English language (writing)

English is 'top-loaded'

Key points are stated:

- early in paragraph
- early sentence

then explained further



101

For paragraphs to be effective

- Ideas must be organized
- Continuity must be clear
- Important ideas must be emphasized



102

Common sentence functions

| Structure | Notes |
|-----------------------------------|--|
| Transition sentence | <ul style="list-style-type: none"> paragraph may open with a transition from a previous paragraph |
| Background information | <ul style="list-style-type: none"> background information on the topic that provides some context for the reader |
| Topic sentence | <ul style="list-style-type: none"> gives the main point of the paragraph that must be explained, defined, proven, or analyzed |
| Elaboration of the topic sentence | <ul style="list-style-type: none"> gives more specific details of the structure of the paragraph that follows |
| Supporting sentences | <ul style="list-style-type: none"> standard type of sentence that develops the topic sentence |
| Conclusion | <ul style="list-style-type: none"> sentence that summarizes the key points of the paragraph |

103

Paragraph sample

To flourish, an information system may require a specific blend of hospital or organizational characteristics in which to root [7-9]. The precise mix of this "nutrient environment" is not well defined. Attempts to characterize this environment have been challenged by a lack of standardized instruments that measure the degree to which a hospital information system is automated [10,11]. A reliable measurement system must be constructed using a socio-technical view of inpatient medicine [12]. This view holds that the delivery and quality of clinical care is influenced by dynamic interactions between the social aspects of an organization, i.e., its policies, norms, and culture, and its technical routines, such as those imposed by an information system.

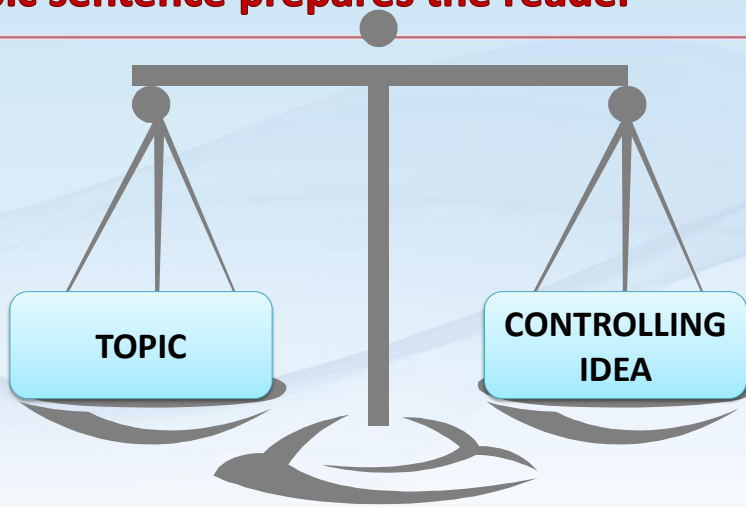
104

Common organization patterns



105

Topic sentence prepares the reader



Example

Blood was sampled from infants 3 months after delivery for **analysis of numbers and percentages of WBCs and lymphocyte subsets.**



107

Example

In the statistical analysis of immune cell results the significance level was set to $p \leq 0.01$, **since multiple comparisons were made.**

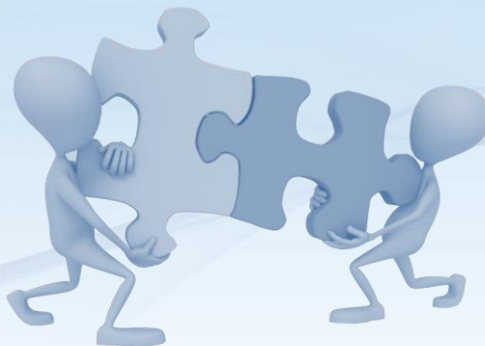


108

Supporting sentences

Provide

- Background
- Evidence
- Explanation



109

Example

The total exposure scores were **subsequently divided into** quartiles in the final statistical analyses of associations **between** infections **and** total organochlorine exposure.



110

Example



A comparison of personal characteristics **between** the study participants **that did not donate** infant blood (N = 104) **with those donating** infant blood (N = 86) **showed no significant differences** in age of the mothers and infants (t-test, $p = 0.29$ and $p = 0.82$) (Table 1).

111

Example

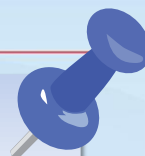


We did not calculate a sum of the absolute concentrations **since such a summation** assumes equal immunomodulatory potency of all the studied compounds. **For example, when absolute concentrations are summed**, effects of relatively potent compounds present at low concentrations **may be underestimated**, and effects of less potent compounds present at high concentrations **overestimated**.

112

Creating continuity:

Repeat key nouns, and use transitions to indicate relationships that assist your reader to follow your logic



113

Repeating key nouns

For example, when the absolute concentrations are summed, effects of relatively potent compounds present at low concentrations may be underestimated, and **effects of less potent compounds present at high concentrations overestimated**. We avoided **this problem** by summing the exposure scores for each compound group.



114

Example

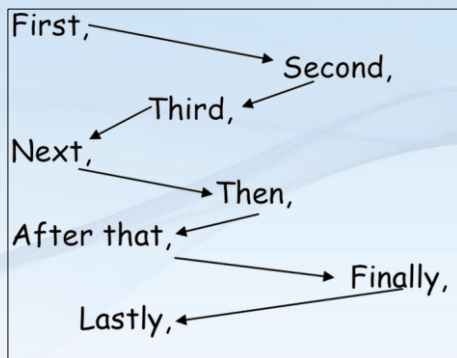
Infants with the highest prenatal CB 28+52+101 exposure had a significantly increased odds ratio for respiratory infections during the first three months after birth compared with the lowest exposed infants (Table 5). This finding did not change in multivariate-adjusted logistic regression analysis.



115

Use transitions to indicate relationships

Therefore, infants of mothers accepting blood sampling were sampled until 90 infants had been sampled.



116

Example

At that time point, 277 mothers had been asked to donate a blood sample from their infants.



117

Example

The resulting concentration of toxicity equivalents (TEQs) for each congener was **then** summarized.



118

Example

In this case, **if** an infant scored 5 for total CB 28+52+101 exposure, 8 for mono-ortho PCB exposure, 6 for di-ortho PCB exposure, and 5 for p,p'-DDE exposure, **then** the summed total of the organochlorine compound exposure would be 24.



119

Example

(1) In the logistic regression analysis all independent variables were categorized in order to handle outlier problems. (2) **First, ORs** were calculated in regressions with the exposure to each organochlorine compound group as the only independent variable. (3) **In the next step**, the **ORs** were adjusted for the same possible confounders as in the analyses of immune cell counts/percentages.



120

Example

(1) After delivery, the **mothers** were visited by a midwife when the **infant** was **3 months old**. (2) In an in-person interview, using a structured questionnaire, the **mothers** answered questions about **infant** sex, vaccination, nursing habits, and health **during the first 3 months**. (3) **Women** gave information about the extent of nursing for **each week of the 3 month period** (full, partial, and no nursing). (4) The **participants** also gave information about the health of their **children** each **week from delivery to the date of the interview**.



121

Practice

(1) We used three stages to develop financial management education program. (2) A wide range of references review was done, 55 financial management education contents were selected. (3) Two times focus group interviews were done, the participants of FGI were 11 nurses who had worked for more than 3 years in the hospital, and 9 contents were selected by two groups' agreements. (4) 12 professionals including professor, accountant, and nurse manager checked CVI (content validity index), 6 education topics were selected.



122

Sample solution

(1) We used **three stages** to develop a financial management education **program**. (2) **First**, a wide literature review was performed, with 55 financial management education practices **then** selected. (3) **Second**, **two rounds of focus group interviews** were conducted: **1)** the FGI participants were 11 nurses who had worked for more than 3 years in the hospital, and **2) 9 topics** were selected **by agreement from within the two groups**. (4) **Third**, 12 professionals including professors, accountants, and nurse managers reviewed the **content validity index (CVI)**, before **finally** selecting **6 topics** for the **program**.

123

Paragraph-writing summary

- Strength starts with structure
- Importance of topic and supporting sentences
- Creating continuity in medical writing is critical for clarity

SO



Need to present information in a clear logical manner so that your readers can quickly process the importance of your work.

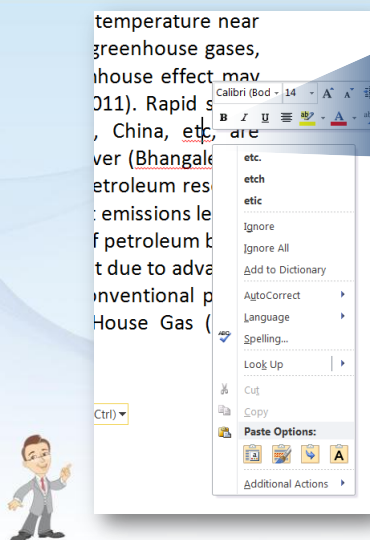
124



COMPUTER USE IN WRITING

125

'Right Click': Spelling

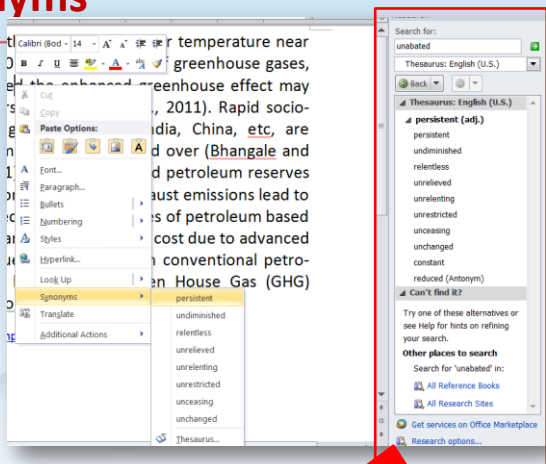


- Red underline
- If word is not in personal dictionary, 'Add to dictionary'

126

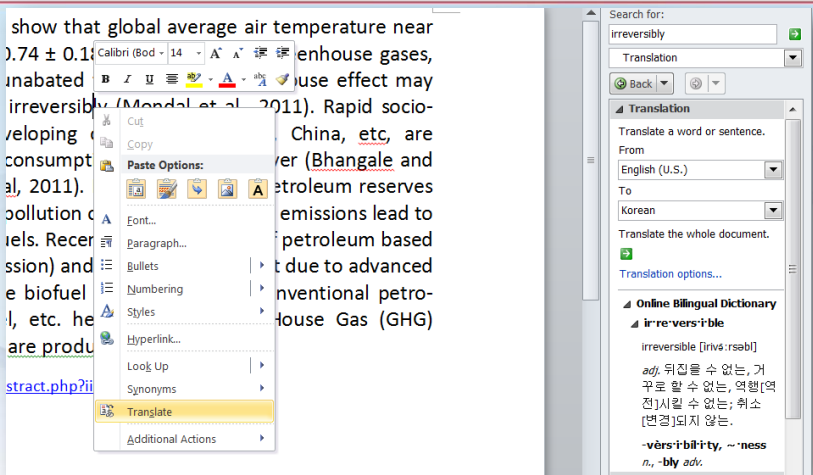
'Right Click': Synonyms

- Remove awkward or repeated vocabulary
- Choose and replace directly
- If appropriate word is not visible, can choose 'Thesaurus' to open a further panel, giving more options



127

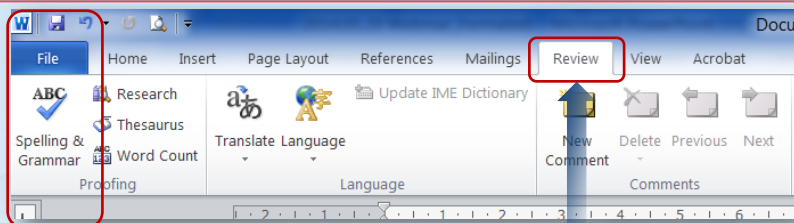
'Right Click': Translate



- Useful when working in teams, if uncertain what the word in the file refers to.

128

Review Tab: Spelling and Grammar



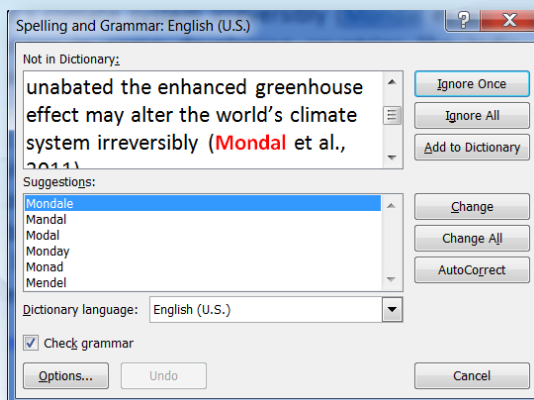
2

1

- 'Review' is a tool that is under-used by many writers
- Many features to assist writers (some repetition from 'right-click')

129

Review Tab: Spelling



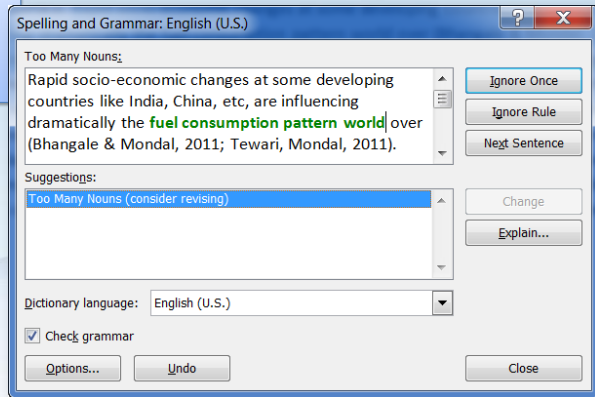
- Use this as a final check before submitting a paper
- Spelling in **RED** (test before 'add to dictionary')



130

Review Tab: Grammar

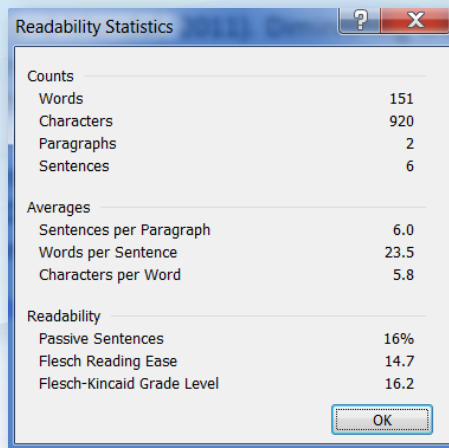
- Grammar in **GREEN** (suggestions provided, but not always accurate)



131

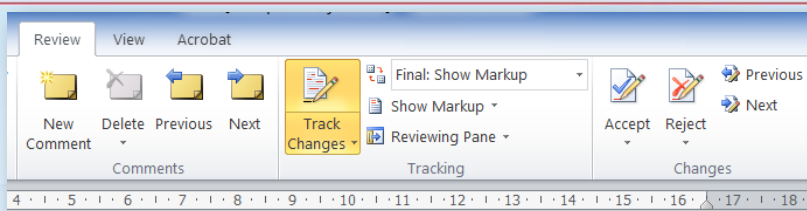
Readability Statistics

- Word and sentence count (basic)
- Words per sentence (avg. 17-22)
- Passive sentences (max. 25-30% for science; much less for others)
- Grade level (above 12 for publishing)



132

MS Word: Track Changes



- Industry-standard tool
- Records all changes made in a file
- Leaves author in control
- No need to re-type text

133

Track Changes: Example

The influence existence of Greek mythology on in-so-called "popular" music is is very more significant than one can imagine and frequent than one could think in their imagination. Traces A few interesting snippets of this influence phenomena can be found in a few some songs and ballads of the sixties. However, But in that period, the references to mentions of Greek gods, heroes, and /-heroines seemed to be incidental, disconnected loose, and sometimes even ironical. As for example instance, in Lee Hazlewood's Some Velvet Morning (1967), Phaedra's name mention is used more for due to the excitement it arouses than to suggest of the sound of the name itself than to the suggestion of Euripides' tragedy. In contrast to this is A very different case is Aphrodite Mass by The Fugs, a satirical American band (formed in 1965) that aimed to very funny and intentionally shock listening American band formed in 1965. The most surprising, and amazing feature part of this bizarre song is that it is a consists in a musical adaptation of Sappho's Ode to Aphrodite. The lyrics are a faithful translation of just as some as the original Greek text, the words are spelled with a the correct Erasmian pronunciation, and the song is set in and the rhythm is the one of a the Sapphic stanza paragraph.

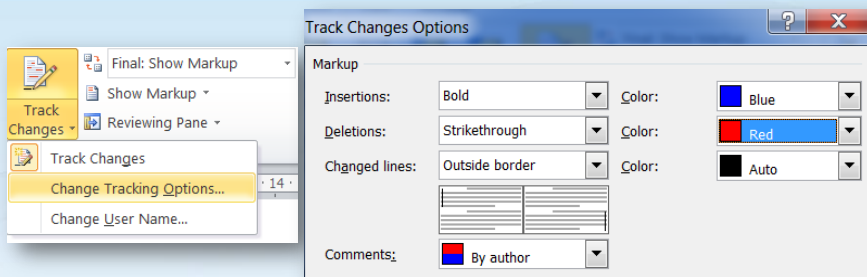
Comment [A1]: "Loose" could have various connotations in this context. I think it would be best to use the word "disconnected" to eliminate any ambiguity.

Messy, and difficult to read.



134

Track Changes: Display



Make the text easier to read



135

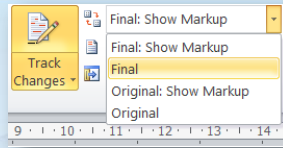
Track Changes: Example

The influence existence of greek mythology on in-so-called "popular" music is very more significant than one can imagine and frequent than one could think in their imagination. Traces A few interesting snippets of this influence phenomena can be found in a few some songs and ballads of the sixties. However, But in that period, the references to mentions of greek gods, heroes, and / heroines seemed to be incidental, disconnected loose, and sometimes even ironical. As fFor example instance, in Lee Hazlewood's Some vVelvet mMorning (1967), Phaedra's name mention is used more for due to the excitement it arouses than to suggest of the sound of the name itself than to the suggestion of Euripides' tragedy. In contrast to this is A very different case is Aphrodite Mass by tThe Fugs, a satirical American band (formed in 1965) that aimed to very funny and intentionally shock listenersing American band formed in 1965. The most surprising, and amazing feature part of this bizarre song is that it is a consists in a musical adaptation of Sappho's -Ode to Aphrodite. -tThe lyrics are a faithful translation of just as same as the original Greek text; the words are spelled with a the correct Erasman pronunciation, and the song is set in and the rhythm is the one of a s the Sapphic stanza paragraph. ¶

- Same sample as previous, but easier to view
- Change options to suit preferences

136

Track Changes: Version

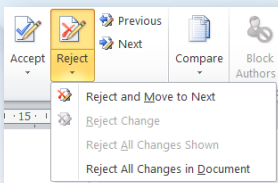
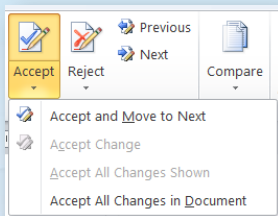


The influence existence of Greek mythology than one can imagine and frequent than of snippets of this influence phenomena can However, But in that period, the reference to be incidental, disconnected loose, and so Hazlewood's Some Velvet Morning (19 excitement it arouses than to suggest of Euripides' tragedy. In contrast to this is American band (formed in 1965) that aim American band formed in 1965. The most that it is a consists in a musical adaptation translation of just as same as the original pronunciation, and the song is set in and

The influence of Greek mythology on so-called Traces of this influence can be found in a few references to Greek gods, heroes, and here even ironical. For example, in Lee Hazlewood more for the excitement it arouses than to Mass by The Fugs, a satirical American band surprising and amazing feature of this bizarre Aphrodite. The lyrics are a faithful translation correct Erasmian pronunciation, and the so

137

Track Changes: Accept/Reject Changes

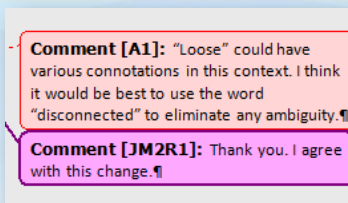
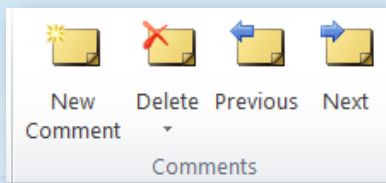


The influence existence of Greek mythology than one can imagine snippets of this influence However, But in that to be incidental, disconnected Hazlewood's Some excitement it arouses Euripides' tragedy. In American band (formed in 1965) that aim American band formed in 1965. The most that it is a consists in a musical adaptation translation of just as same as the original pronunciation, and the song is set in and

- Change-by-change, or in complete text, author can accept or reject changes made by others

138

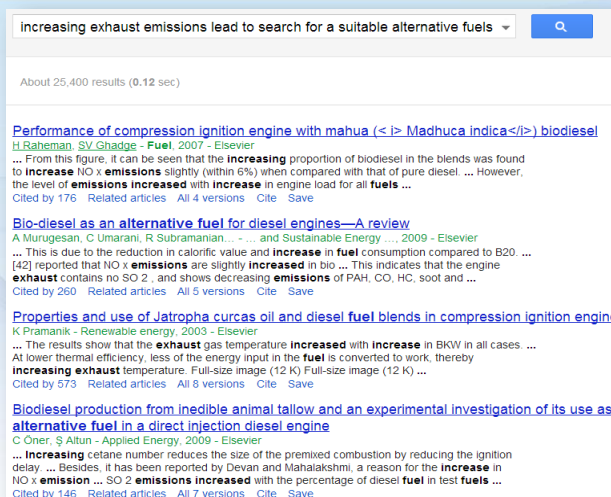
Review Tab: Comments



- Can highlight areas of uncertainty
- Can create dialog with members of your team

139

Google Scholar: Language Corpus



- Word use
- Look for average spelling/use
- Not just a research tool

140



EDITING SAMPLES: BRINGING IT ALL TOGETHER

141

Bringing it all together

It is important to evaluate the pre-treatment alveolar bone state of bidentoalveolar protrusion patients. Generally bone thickness increases in direction from CEJ to root apex. Posterior bone thickness is primarily greater than anterior bone thickness.

Evaluating the pretreatment alveolar bone state of bidentoalveolar protrusion patients **is important**. **Bone thickness generally** increases in direction from **the** CEJ to **the** root apex, **and the** posterior bone thickness is typically greater than **the** anterior bone thickness.



142

Bringing it all together

Bueno et al. generated transgenic (TG) mice which overexpress constitutively activated MEK1 for activation of ERK1/2, and identified the increase of phosphorylated ERK1/2 and the hypertrophy marker proteins; BNP, b-MHC, and skeletal a-actin (Bueno et al. 2000).

For example, Bueno et al. (2000) generated transgenic (TG) mice **that constitutively** overexpress activated MEK1 for **the** activation of ERK1/2, and identified the increase of phosphorylated ERK1/2 and the hypertrophy of marker proteins, **including**: BNP, b-MHC, and skeletal a-actin.



143

Bringing it all together

7 time points, 1 hour, 4 hours, 24 hours, 48 hours, 1 week, 3 weeks and 8 weeks, were picked up from GDS794 and GSE76 microarray data set and 356 common DEGs with DEGs in each MAP-activated mouse were listed up.

Here, seven time points, 1 **h**, 4 **h**, 24 **h**, 48 **h**, 1 **week**, 3 **weeks**, and 8 **weeks**, were **selected** from **the** GDS794 and GSE76 microarray data **sets**, and 356 DEGs in common with the DEGs from each MAP-activated mouse were **listed**.



144

Bringing it all together

The results of vulnerability assessment showed that Jeollanam-do are the most vulnerable in fuzzy TOPSIS method.

Based on the fuzzy TOPSIS method, results of the vulnerability assessment show that Jeollanam-do is the most vulnerable region.



145

Bringing it all together

CeFeO₃ reports show that it exhibits comparable activity to Pt/Al₂O₃ for methane, propane, and soot combustion [2].

CeFeO₃ exhibits comparable activity to Pt/Al₂O₃ for methane, propane, and soot combustion [2].



146

Bringing it all together

Spearman rank correlation analysis indicated that the rankings of TOPSIS and weighted sum method were almost similar, but quite different from ranking of fuzzy TOPSIS.

A subsequent Spearman rank correlation analysis indicated that the rankings of **the** TOPSIS and weighted sum **methods** were **quite** similar, **though significantly** different from **the** fuzzy TOPSIS **ranking**.



147

Bringing it all together

Our data can ensure the representative population in Korea through the nationwide participants and the large sample size. We could avoid recall bias by participants because of using the existing database . The association between several variables and the adherence were statistically significant after adjustment.

Our data **ensures a** representative population **for** Korea **as it is based on a large nationwide sampling of participants. In addition, we avoided** recall bias by participants **by using an** existing database. **Finally, our analyses indicate an** association between several variables, **with** the adherence **being** statistically significant after adjustment.



148

Bringing it all together

In contrast, Self-propagating High-temperature Synthesis (SHS) has been reported to be highly effective for the mass production of CeFeO_3 [3].

In contrast, **self-propagating high-temperature synthesis** (SHS) has been reported to be highly effective for the mass production of CeFeO_3 [3].



149

Bringing it all together

It is simple process with several benefits for obtaining product with accurately controlled composition, and minimizing operating time,

SHS is a simple process with several benefits for obtaining **products requiring an** accurately controlled composition, **which minimizes the operational** time.



150

Bringing it all together

Also, reaction rate is 20 times conventional methods. Several previous papers are greatly contributed to elucidate that the catalytic activity of CeFeO_3 improved potassium (K) substitution for La [3, 4].

Also, **its** reaction rate is 20 times **faster than for** conventional methods. **In addition**, previous papers **have found** that the catalytic activity of CeFeO_3 improved potassium (K) substitution for La [3, 4].



151

Bringing it all together

Even though several hypotheses to the trigger for BPH have been suggested, it mainly caused due to the augmented levels of the androgen or dihydrotestosterone (DHT) [2].

Even though several hypotheses **as** to the trigger for BPH have been suggested, **its main cause appears to be** augmented levels **of androgen** or dihydrotestosterone (DHT) [2].



152

Bringing it all together

Chemical analysis for monitoring endocrine disruptors in aqueous and biological samples has been developed. Chemical analysis provides sensitivity and exact concentration of estrogens in samples. However chemical identification for all estrogen compounds is impossible and chemical analysis alone can not provide the mixture of estrogen compounds such as synergistic and antiestrogenic effect. Therefore, bioassay should be integrated for monitoring estrogenicity.



153

Bringing it all together

A chemical analysis for monitoring endocrine disruptors in aqueous and biological samples **was subsequently** developed. **The chemical** analysis provides sensitivity and **monitors the** exact concentration of **estrogen compounds in the** samples. However, **it should be noted that the** chemical identification **of** all estrogen compounds is impossible, and **that for monitoring the synergistic and antiestrogenic effects,** chemical analysis **alone is insufficient for identifying the precise** mixture of estrogen compounds. Therefore, bioassays should **also** be integrated **in monitoring the** estrogenicity.



154

Bringing it all together

Therefore, a model of a motor with inter-turn fault that is reasonably accurate with respect to magnetic nonlinearity is strongly needed. This need arises because the inductance of the motor changes the operating condition due to magnetic saturation and cross-coupled magnetization effects. In addition, the influence of the distorted transient current caused by the turn fault has to include the magnetic distribution and torque characteristics for improving the fault tolerance in high-reliability applications, where continued operation with degraded performance is much more desirable than complete motor shutdown.



155

Bringing it all together

Therefore, a motor model **that includes** inter-turn faults, **which is** reasonably accurate with respect to magnetic nonlinearity, is strongly needed. This need arises because the **motor** inductance changes the operating conditions due to **the effects of** magnetic saturation and cross-coupled magnetization. In addition, influence of the distorted transient current caused by the turn fault **should** include the magnetic distribution and torque **characteristics in order to improve** the fault tolerance in high-reliability applications, where continued operation with degraded performance **is desirable to** a complete motor shutdown.



156

WRAPPING IT UP



157

Wrapping it up

Topics

- Trends in research writing
- Preparing to write your paper
- Journal paper organization
- Ethical concerns in research writing
- Language shift & style in research writing
- Functional sentences
- Clarity in paragraphs
- Computer use in writing
- Real-world samples

Extra

- Useful Starters



158

Contact Information

意得辑中国办公室

上海浦东新区世纪大道1501号

SOHO世纪广场1305室

邮编: 200122

电子邮箱: fabiao@editage.cn (发表@意得辑)

服务电话: 400-005-6055



For questions concerning the materials:

John D. McDonald

john.mcdonald@editage.com

Dr. Eddy™ personifies our efforts to support authors with good publication practices. He can be found at **Editage Insights**
<http://www.editage.com/insights/tutorials>

159

USEFUL STARTERS



160

Introduction

Expressions for a journal article's first sentence

- Recently, there has been a **growing** interest in . . .
- The possibility of . . . has generated **wide** interest in . . .
- The development of . . . has led to the hope that . . .
- Knowledge of . . . has a **great** importance for . . .
- The study of . . . has become an **important** aspect of . . .
- A **central** issue in . . . is . . .
- The . . . has been **extensively** studied in recent years.
- **Many** investigators have recently turned to . . .
- The relationship between . . . and . . . has been investigated by **many** researchers.
- **Many** recent studies have focused on . . .



161

Introduction

Expressions that make a generalization about the current state of knowledge or practice

Examples:

- The aetiology and pathology of . . . is **well-known**.
- There is now **much** evidence to support the hypothesis that . . .
- The . . . properties of . . . are **still** not completely understood.
- A standard procedure for assessing . . . has been . . .
- . . . are **often** criticized for . . .

Expressions that make a generalization about phenomena, focusing on frequency or complexity:

Examples:

- . . . is a **common** finding in patients with . . .
- An **elaborate** system of . . . is found in . . .
- There are **many** situations where . . .
- . . . is a **rich** source of . . .



162

Results and Discussion

Study limitations

Expressions for limitations of the study:

- It should be noted that this study has been **primarily** concerned with . . .
- This analysis has **concentrated on** . . .
- The findings of this study are **restricted to** . . .
- The **limitations** of this study are **clear** . . .

Expressions for stating conclusions that should NOT be drawn:

- However, the findings **do not imply** . . .
- The results of this study **cannot be taken as evidence** for . . .
- Unfortunately, we are **unable to determine** from this data . . .
- The **lack of** . . . means that we **cannot be certain** . . .

Expressions for very limited studies:

- **Notwithstanding** its **limitations**, this study **does suggest** . . .
- **Despite** its **preliminary** character, the research reported here **would seem to indicate** . . .
- **However exploratory**, this study **may offer some insight** into . . .



163

Open source materials used (CC License)

- Energy and Environment Research; Vol. 2, No. 2; 2012
<http://dx.doi.org/10.5539/eer.v2n2p53>
- Journal of Atomic, Molecular, and Optical Physics
Volume 2011 (2011), Article ID 573179, 4 pages
<http://dx.doi.org/10.1155/2011/573179>
- International Journal of Electrochemistry Volume 2011
(2011), Article ID 561204, 7 pages
<http://dx.doi.org/10.4061/2011/561204>
- (2004) A Mechanism of Prion Propagation. PLoS Biol 2(10):
e360. <http://dx.doi.org/10.1371/journal.pbio.0020360>



164

Suggested solutions for questions in the materials

Choose the correct verb form (active/passive) for each sentence below.

1. Therefore, the methodology of the generalized impulse response function **was developed** in order to carry out meaningful analyses on VAR models.
2. To investigate the role of oligomers in NM amyloid formation and growth, the researchers **explored** the relationship between monomer concentration and polymerization progress.

Article use in Academic Writing

As the average population of the United States has increased, so too has the number of hearing impaired individuals. Approximately 20 million hearing aids are now in use, and this number is expected to rise. Although there have been considerable advances in hearing aid technology, they still have a number of drawbacks, one of the most notable ones being problems in dealing with important environmental sounds. For example, people who are deaf in both ears are unable to determine the direction of a sound with a conventional hearing aid. This limitation could result in an accident or injury if the wearer cannot determine the direction of a siren or other warning sound. Another problem concerns people suffering from high-frequency hearing loss. This type of hearing loss removes many consonants and other useful environmental noises, such as the ringing of a telephone.

Choosing appropriate words

Renal blood flow was drastically compromised when the aorta was obstructed.

☐ → greatly reduced OR decreased by 80%

Animals were studied 4-6 weeks later.

☐ → what animal? repeat animal name (rat, mouse, etc.)

The salicylate are rapidly absorbed with a peak plasma concentration within 2 h.

☐ → , reaching OR , as evidenced by

After 4 h of hemodialysis, we abruptly ended the hemodialysis procedure.

☐ → delete 'of hemodialysis'

Renal blood flow was drastically compromised when the aorta was obstructed.

☞ **greatly reduced OR decreased by 80%**

Animals were studied 4-6 weeks later.

☞ **what animal? repeat animal name (rat, mouse, etc.)**

The salicylate are rapidly absorbed with a peak plasma concentration within 2 h.

☞ **, reaching OR , as evidenced by**

After 4 h of hemodialysis, we abruptly ended the hemodialysis procedure.

☞ **delete 'of hemodialysis'**