



Organização: Pró-Reitoria de Pesquisa - USP



Capacitação em Escrita Científica

Módulo 8

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Módulo 1: O Gênero Literário

Seções de Um Artigo Científico

Módulo 2: Estrutura 1: *Abstract*

Módulo 3: Estrutura 2: *Introduction*

Módulo 4: Estrutura 3: *Results and Discussion, Conclusion*

Módulo 5: Estilo

Linguagem 1: Especificidade, Complexidade e Ambiguidade

Módulo 6: Linguagem 2: Redundâncias, Ação no Verbo, Fluidez de Texto, Ritmo de Escrita

Módulo 7: Linguagem 3: *Plain English*, Escrever em Inglês, Preposições

Módulo 8: Linguagem 4: *Topic Sentences, Cover Letters, Final Remarks*

Módulo 8

Linguagem 4:

Topic Sentences, Cover Letters, Final Remarks

Language IV

A topic sentence is the most important sentence in the paragraph.

T. Sentences are strongly correlated with:

- Topic (keyword) and
- Message of the paragraph (verb/subject structure).

To assess the distribution, size, and shape of ganglion cell bodies in the tracheal neural plexus, we examined individual cell bodies in their entirety at 100-400 x with a compound microscope. For the assessment of distribution, first ganglion....

There are three different theories put forward for the very slow relaxation of catch muscles in molluscs. One theory holds that....

Pulmonary nerve endings were relatively insensitive to diguanides, as seen in table 1). Of 25 pulmonary nerve ending tested, only 10 were stimulated....

Essentials of Writing Biomedical Research Papers by
Mimi Zeiger, McGraw-Hill Professional, 2nd Ed,
2000.

Garlic (*Allium sativum* L.) has been used for centuries for medicinal purposes.

[...]. Its use for healing purposes can be traced back as far as 1550BC when documentations of its therapeutic use first appear in Egypt (Hassan, 2003; Rivlin, 2001). In modern times belief in the beneficial effects of garlic on health has led to it being used for a number of conditions. Garlic has been shown to reduce the risk of cardiovascular disease (Aboul-Enein and Aboul-Enein, 2005), and possess anti-microbial (Sivam, 2001) and antioxidant properties (Imai et al., 1994). This essay will explore research into garlic's potential roles in reducing cancer risk and in treating cancer.

<http://www.monash.edu.au/lls/llonline/writing/science/paragraphs/1.2.xml>

Cystic fibrosis (CF) is one of the most common genetic disorders.

[....] CF is inherited as an autosomal recessive trait and a defective gene causes the body to produce an abnormal amount of very thick, sticky mucus which clogs the lungs and pancreas, interfering with breathing and digestion. This mucus builds up in the breathing passages in the lungs and the pancreas and respiratory complications develop from the blockage of the bronchial passages. Eventually, the cilia which are responsible for clearing the mucus are destroyed. In addition, the mucus traps bacteria which cause infections and permanent damage to the lungs, and may also block the ducts of the pancreas which contains enzymes necessary for the digestion of food.

<http://www.monash.edu.au/lls/llonline/writing/science/paragraphs/1.2.xml>

Student success at university is the result of a number of inter-related factors.

[....]. The most important factor is a student's past experience of study. If a student has already developed good study habits, study at university should not be difficult. Good study habits need to be complemented by interest and motivation, factors which are important when competition gets tough. We should however not underestimate the distracting effects of financial and personal difficulties. All students have to grapple with these at some stage of their university life. Beyond the personal factors it has to be said that there is also a certain element of luck involved in success: this includes finding excellent teachers and the subject matter that inspires one to give one's best.

<http://www.victoria.ac.nz/llc/academic-writing/index.html>

Find the appropriate Topic sentence:

_____ (topic sentence).
Arriving in the land below the Rio Grande River, the Spanish conquistador Hernando Cortez was surprised to see the local inhabitants raising crops that included avocados, corn, garlic and nuts. Onions, tomatoes, chilli peppers and pumpkins were also grown in the rich soil. Irrigation systems were employed in some of the drier regions. The Aztec farmers also were skilful in creating terraced gardens to make the most of the rainfall and to minimise soil erosion. Evidence shows that they employed crop rotation as well as natural fertilisers to enhance the production of their farm products.

Options:

1. The Aztecs of Mexico were a nation of accomplished farmers.
2. Hernando Cortez discovered farming in Mexico.
3. Mexico is blessed with rich farmland and an abundance of food products.

<http://www.victoria.ac.nz/llc/academic-writing/index.html>

The non-significant main effect of ITIP (information sharing), although unexpected, has precedence in the literature. For example, in a study of divisions of manufacturing companies in the food and packaged goods industry in 1998, Kulp et al. (2004) found no direct positive association between information sharing and subjective performance measures, barring sharing of store inventory information. Similarly, the non-significant main effect of ITT, though unsupportive of H1, is consistent with a study of firms in the automotive, computers and electronics sector. In that study (Devaraj et al., 2007, p. 1212), “. . .findings indicated that e-business capabilities, by themselves, do not directly impact operational performance.”

Journal of Operations Management 31 (2013) 313–329

M8P1 Nature Mat

When the materials from which the spheres were made charged at different rates, structures of different morphologies could form during **the course** of charging. Figure 3 illustrates the assembly of 40 Teflon and 80 PP spheres agitated at $\omega \sim 9$ Hz and $A \sim 10$ mm. *The Teflon* spheres charged more rapidly than the PP ones (Fig. 3a). When, after approximately 30 seconds from the start of agitation, the ratio of charges Q_{Tef}/Q_{PP} was close to -2 , *the spheres organized into a hexagonal* structure (Fig. 3b, left). PTMC simulations predicted this structure to be a global energy minimum of the system. As the agitation continued, the magnitudes of charges on the Teflon and PP spheres equalized. The hexagonal arrangement became energetically unstable. After ~ 15 minutes, approximately half of the PP spheres were expelled towards the walls of the container, and the morphology of the aggregate changed to square (Fig. 3b, right).....

Grzybowski et al., *Nature Materials* 2, 241–245 (2003)

M8P2 IEEE Sig Proc

Other articles in this issue also discuss statistical models for location measurements. Compared to Gustafsson and Gunnarsson [87], who present models for RSS, TOA, and AOA measurements useful for cellular mobile system (MS) location and tracking, our focus is on the shorter-range, low-antenna, sensor network environment. Gezici et al. investigate UWB measurement models for both RSS and TOA in much greater detail than in this article, in which UWB is just one of multiple measurement modalities [89].

Patwari N. et al, IEEE Signal Processing Magazine, 2005, p 54

Final Remarks

Transform the text below into a good Abstract

In this work we describe the experimental development of special sensors for diagnosis of diseases. Experimentally, the sensors comprise antibodies that recognize specific kinds of human proteins produced by a persons immunological system. In this context, a new methodology for protein detection was developed and the efficiency increase is presented. Protein isolation techniques are discussed. The amount of protein detected by the sensors was evaluated. The preliminary results were analyzed utilizing appropriate statistical methods. To optimize the systems, the sensor were experimentally produced using different immobilization strategies and all the collected data obtained from preliminary results show that different types of cancer cell lines can be detected at very low limits of detection. The obtained results corroborated previous results found in published papers. The systems will be evaluated in clinical trials in a period of few months. Since highly sensitivity and specificity were achieved by the sensors, clinical areas may benefit from our new technologies.

The Paper is ready.

What happens now??

The cover letter is the document that introduce the manuscript to the editor.

A good cover letter makes clear the importance of the paper and the reasons it deverves to be published.

Hafner, J.H, *The art of Cover Letter*, ACS Nano, 4 (5) 2487, 2010

Example 1

Dear Editor:

Please find enclosed a paper entitled “Exact statistical methods for presenting data of rare diseases” for consideration in your journal.

The data included in this manuscript have not been published previously and are not under consideration by any other journal. A form with consent to publication signed by the authors is enclosed. All authors have read this final manuscript and have given their approval for the manuscript to be submitted in its present form.

I enclose:

Three paper copies of the manuscript;

Three copies of the tables and figures;

A labelled disk containing the electronic version.

As the corresponding author, my contact details are shown on the cover page of the manuscript

Yours Sincerely

Source: *Scientific Writing, Easy When you Know How*, Peat, J., Elliot, E., Baur, L., Keena, V., BMJ Books, 2009

Example 2:

Dear Editor:

Please find attached the manuscript entitled: **A new strategy to investigate the toxicity of nanomaterials using Langmuir monolayers as membrane models**, which we submit for publication in Nanotoxicology. The reasons why we believe it deserves to be published stem from the following features:

- i) To our knowledge, this manuscript is the first report of a novel strategy to investigate the types of interaction that may occur between a nanomaterial, *viz.*, carbon nanotubes and phospholipid membranes, in a way that experimental parameters can be controlled at the molecular level.
- ii) The methodology is reported here for a specific carbon nanotube/dendrimer complex, which had been applied as drug-delivery systems. However, this new methodology may be of interest to a wider audience investigating the toxicity of nanomaterials, either *in vitro* or *in vivo*, since the same strategy can be applied to different nanocomplexes, nanoparticles, etc.

Sincerely

Prof. Dr. Valtencir Zucolotto



The Manuscript



JPCC Manuscript

JPCC manuscript corrected version

JPCC response letter

JPCC Proofs

JPCC Editorial revision

How to skim a paper?????

1. Read the Title
2. Check the Authors and Date
3. Read the Abstract
4. Read the 1st Paragraph
5. Read the First Sentence of each Paragraph
6. Look quickly at each Figure/Table and Captions
7. Read the Conclusion

Adapted from: Science Research Writing for Non-Native Speakers of English, Hilary Glasman-Deal, Imperial College Press, 2009

Scientific Writing, Easy When ou Know How, Peat, J., Elliot, E., Baur, L., Keena, V., BMJ Books, 2009

Essentials of Writing Biomedical Research Papers by Mimi Zeiger, Mcgraw-Hill Professional, 2nd Ed, 2000.

Science Research Writing for Non-Native Speakers of English, Hilary Glasman-Deal, Imperial College Press, 2009

<http://www.uottawa.ca/academic/arts/writcent/hypergrammar/partopic.html>

Muito Obrigado

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