Abstract Writing

Listen to and watch the video "Writing (Good) Abstracts"
https://www.youtube.com/watch?v=MADC23TAHTg

and list the most common abstract styles and their characteristics.

1. _____
   _____
2. _____
   _____
3. _____
   _____

STRUCTURE – SPECIFIC SECTIONS

1. Background/introduction/situation
2. Present research/purpose
3. Methods/materials/subjects/procedures
4. Results/findings
5. Discussion/conclusion/implications

Ex. 1: Each section answers some implied questions. Match the following questions with the sections above.

a. What was discovered? Section ___

b. How was the research done? Section ___

c. What do we know about the topic and why is it important? Section ___

d. What do the findings mean? Section ___

e. What is this study about? Section ___

Robert Helán

http://www.palgrave-journals.com/jors/journal/v61/n2/full/jors2008144a.html

Deterministic Mathematical Modelling for the Spatial Allocation of Multi-Categorical Resources: with an Application to Real Health Data

Richard S. Segall

This paper presents some mathematical formulations of deterministic non-linear optimization models for planning the spatial distribution of public service facilities and their utilization. The modelling is performed as a function of multi-categorical resource types and the consumer's zone of residence over a large geographical domain. The mathematical solution to the deterministic model, its parameter estimation by log-linear regression, and some preliminary results of simulation for a Massachusetts hospital database are presented.

Enterprise risk management: coping with model risk in a large bank

D Wu and D L Olson

Enterprise risk management (ERM) has become an important topic in today's more complex, interrelated global business environment, replete with threats from natural, political, economic, and technical sources. Banks especially face financial risks, as the news makes ever more apparent in 2008. This paper demonstrates support to risk management through validation of predictive scorecards for a large bank. The bank developed a model to assess account creditworthiness. The model is validated and compared to credit bureau scores. Alternative methods of risk measurement are compared.

http://www.sciencedirect.com/science/article/pii/S0307904X15002474

Numerical solution of nonlinear Volterra integro-differential equations of fractional order by the reproducing kernel method

Wei Jiang

Fractional calculus is a extension of derivatives and integrals to non-integer orders. It has been used widely to model scientific and engineering problems. In this article, the reproducing kernel theory is applied to solve a kind of nonlinear fractional order Volterra integro-differential equation. The fraction derivatives are described in Caputo sense. In order to solve this kind of equation, we discuss and derive the approximate solution in the form of series with easily computable terms in the reproducing kernel space, by introducing a simple algorithm to implement this process. Some numerical examples are given to demonstrate the validity and applicability of the technique.

Language for presenting the research/purpose

- Third person style:

The / This	paper article study analysis	}	analyzes, investigates, explores, examines, re-examines, outlines, describes, shows, introduces, evaluates, considers …

- First person style:

In this	paper article study analysis	}	I / we*	{	analyze, investigate, explore, examine, re-examine, outline, describe, show, introduce, evaluate, consider…

Ex. 4: Read the sentences below and fill in the gaps with one of the following verbs:

develops - calls - argues - provides - looks - consider

a. This paper _____ an axiomatic basis for a representation of personal preferences in which ...

b. The authors _____ a broad class of situations where a society must choose from a finite set of alternatives.

c. This paper _____ that the analysis of these games involves a key technical issue.

d. This paper _____ at the effectiveness of the Environmental Protection Agency (EPA) in reducing the time that manufacturing plants spend in a state of non-compliance.

e. This study _____ into question the established view that lack of information on clean-up cost functions represents a serious problem ...

f. This paper _____ a model of corporate hierarchy in which workers accumulate heterogeneous human capital suitable for different positions within the hierarchy.

Ex. 5: Sometimes, the Methods section sentences are expressed in the passive form. Rewrite the following sentences using the passive voice.

a. We then monitored the physicochemical parameters of the lake water for 1 year.

_____

b. We collected samples for particulate toxin analysis from more than 140 lakes...

_____

c. We detected microcystins in nearly 50% of the samples.

_____

* Only in case there are more authors than one.

Language for presenting the findings

The results / findings — show, state, suggest, uncover, indicate, imply, provide…

Ex. 6: Read the following sentences from different abstracts. Each sentence contains a problem in usage (grammar or vocabulary). Identify and fix the problems.

a. In this contribution are described several problems with toxic cyanobacterial blooms in Brno Reservoir.

b. We are also focused on the implementation of new technologies for the management of harmful algal blooms.

c. The aim of the paper is to deal with the problematic of cyanobacterial influence on tourism.

d. It was tested by the study whether specific cyanobacteria would react to the applied strategies...

e. The paper is devoted to the analysis of problems with cyanobacteria.

f. Laboratory animals are not susceptible to these diseases, so research on them is hampered.

g. Our results are similar to previous studies.

FINAL SUGGESTIONS

Here are some other points to keep in mind when writing abstracts. Read and discuss them.

- If an abstract is read along with the title, do not repeat or rephrase the title. It will likely be read without the rest of the document, however, so make it complete enough to stand on its own.
- Do not refer in the abstract to information that will not be included in the presentation/article.
- Choose whether to write in first person style ("*I*" or "*We*") or third person style ("*This dissertation shows...*"). If you prefer first person style, however, avoid using "we" unless your work has more than one author. Likewise, avoid beginning each sentence with "*I*". In other words, third person style is always preferable.
- Do not overuse passives. "*The study tested*" is better than "*It was tested by the study*".
- If possible avoid trade names, acronyms, abbreviations, or symbols. You would need to explain them, and that takes too much room.
- Abstracts must contain key words about what is essential in the presentation/article. Key words are used to classify abstracts in databases. Effective key words allow researchers to search for your publication easily. For published work, this may result in someone citing your article.
- Be coherent (logical) and cohesive (connect your ideas).

TASK 3 Understanding and responding to feedback

1 10.6 **You are going to listen to a tutor and a student giving feedback about the presentation in Task 1. Complete the following table using brief notes.**

Criteria	Tutor comments	Student comments
Overall presentation	1	interesting
Organization	2	clear
Connections	3	4 .....
References and statistics	right balance	-
Pace	5	slow down even more

2 Work in pairs and check your answers.

3 How would you describe the comments of a) the tutor, and b) the other student? Select from the following and give evidence.

sensitive critical helpful not useful

4 10.6 **Listen again and note down the speaker's responses to the feedback. How would you describe his responses? Give evidence.**

ACADEMIC LANGUAGE

Giving and responding to feedback

There are a variety of ways of giving and responding to feedback.

Giving feedback

- Statement and question:
  You said you spent a lot of time on organization. How do you think the organization went?
- Critical question: *After the first part ... you used a lot more statistics or references to sources. Why did you leave them out in the part relating to transport?*
- Inviting comment: *What about the pace?*

Responding to feedback

- Agreement: *I think so. / Ah, OK.*
- Explanation: *I wanted to ease the audience into the talk and not overwhelm them ...*
- Hedging: *Maybe I could've been a bit quicker.*
- Defending a point: *Yes, in some cases perhaps, but I'd probably need to cut something else out to keep within the time.*

TASK 4 Giving a seminar presentation

1 Prepare a short presentation on a subject relating your area of study. Follow the stages.

1 Select a subject from your area of study which features cause and effect relationships.
2 Prepare a maximum of five PowerPoint slides for your talk. Use diagrams (see Task 1).
3 Use the diagrams to help you to write your notes. Use references and statistics.
4 Practise going through your presentation with another student.
5 Select at least two areas that you would like feedback on before you give your presentation, e.g. organization and pace, or connection of ideas and examples. Allocate them to the tutor or other students.
6 Limit your presentation to 10–15 minutes.
7 Give your presentation to the class or a group of students using PowerPoint, if possible.
8 Allow time for feedback at the end.
9 Respond to feedback.