



# Writing a research article for publication in an academic journal

CODATA Research Skill Development Webinar

Monday 1<sup>st</sup> June 2020

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- AuthorAID was launched to support researchers in developing countries, and has a community of over 20,000 researchers in 174+ countries
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  - Free online mentoring and collaboration
  - Free resources and training materials
  - Addressing gender inequities in higher education

#### www.authoraid.info

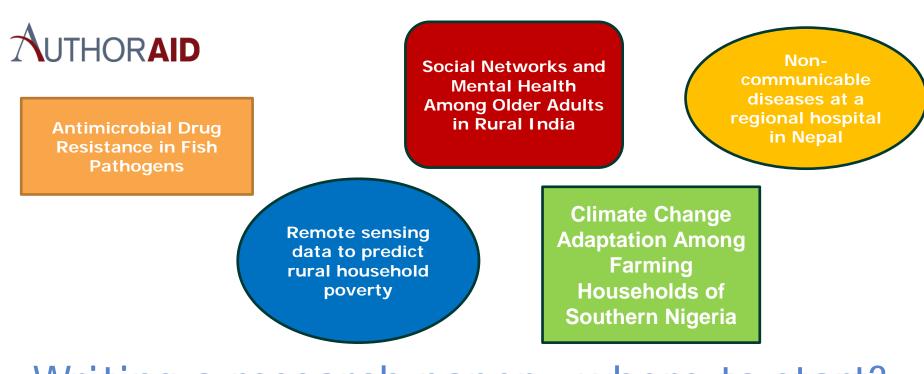




AuthorAID online courses

- Scientific Writing 6th July 2020 to 24th August 2020 (6 weeks)
- Research Writing and Proposal Writing 8th September 2020 to 20th October 2020 (8 weeks)

https://moodle.inasp.info/







## AUTHORAID Publishing an article in a journal

- Research writing for publication is different from writing a thesis or dissertation
- Research articles are short, concise, carefully formatted packages of content
- Think about your audience (who do you need to impress)
  - Journal editors (the gatekeepers)
  - Peer reviewers (the gatekeepers)
  - Other scientists and academics
  - The public, practitioners, policymakers

# AUTHORAID Publishing an article in a journal

Think about your goal:

- Get cited by other researchers
- Add a novel solution or perspective to the literature
- Influence practice or policy
- Identifying (and reading!) target journals first is important
- Journals have different:
  - Aims and scope
  - Style guides and formats
  - Audiences
  - Ethical guidelines
  - Data sharing requirements



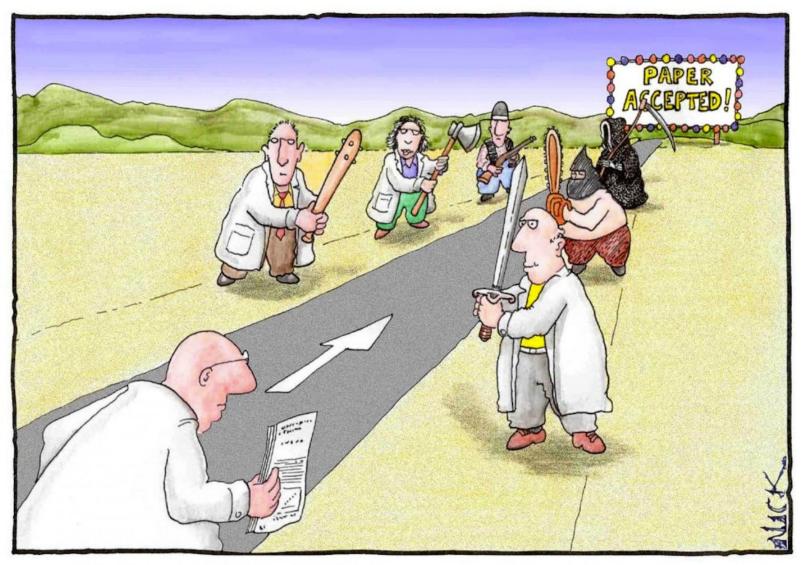
#### Peer review

- You will have to pass through a round of peer review before your paper is published.
- Peer review is often very difficult and timeconsuming, but essential to refining your work.
- Sometimes you may not even make it as far as peer review – an editor may reject your paper ('desk rejection') because it does not meet the scope of the journal.
- This is why it's important to read the 'Aims and Scope' and 'Instructions to Authors' pages

See also:

Dealing with Peer Review Dr Carole Sargent Peer review: the nuts and bolts by Sense about Science

#### **Peer review**



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

# **Identifying a Target Journal**

- Decide early (before drafting the paper).
   Do not write the paper and then look for a journal.
- Familiarise yourself with the major and minor journals in your field
- Look for journals that have published work similar to yours.
- Which journals already appear in your reference lists and citations?

### 

#### Some Factors to Consider

- Audience
- Subject scope
- Geographical scope
- Access / Open Access
- Prestige
- Publication time
- Likelihood of acceptance
- Indexing / 'impact factor'



#### AUTHORAID The important journal indexes

Clarivate Web of Science (Journal Citation Reports) Master Journal List: <u>http://mjl.clarivate.com/</u>

Scopus<sup>\*</sup> (CiteScore) Scopus is also good indicator of a high-quality, credible journals. Check Scopus Sources or Scimago: <u>https://www.scopus.com/sources</u> <u>http://www.scimagojr.com/journalsearch.php</u>



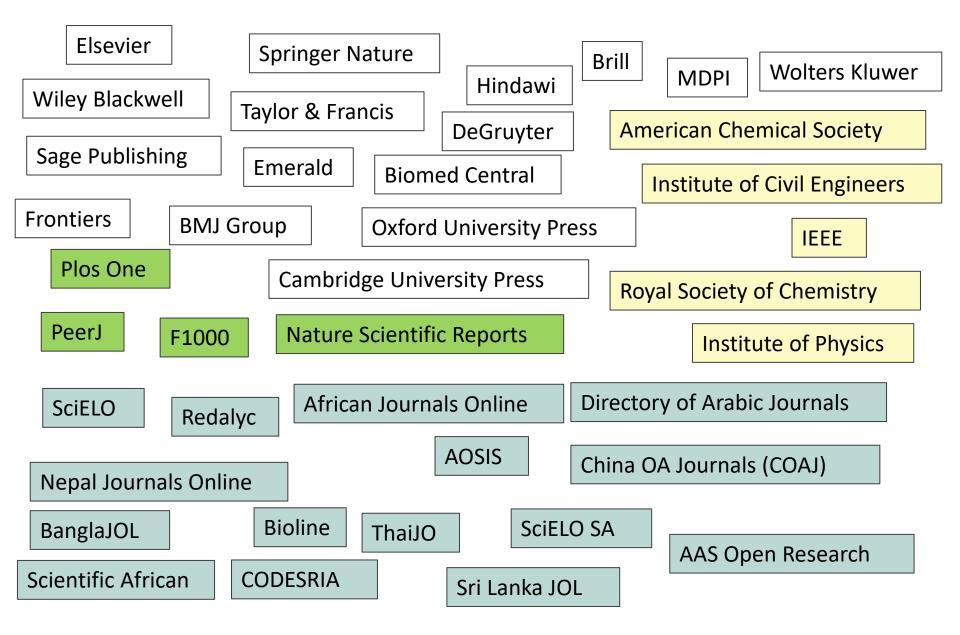
Pubmed (medical journals). Check journal is "indexed for **MEDLINE**": <u>https://www.ncbi.nlm.nih.gov/nlmcatalog/</u>



The Directory of Open Access Journals (DOAJ) <a href="https://doaj.org/search">https://doaj.org/search</a>



#### Journal publishers and platforms



### Different types of journal

| 'Top tier'<br>multidisciplinary<br>journals<br>• Nature<br>• Science<br>• PNAS  | U U | d Jnl of Medicine<br>Diitical Economy  | 'Megajournals'<br>Plos One<br>Scientific Reports<br>F1000<br>PeerJ<br>SageOpen |
|---|-----|--|--|
| <ul> <li>International 'Specialised' journals</li> <li>Lancet Diabetes and Endocrinology</li> <li>Journal of Supply Chain</li></ul> |     | <ul> <li>'Regional' journals</li> <li>Chinese Journal of Ecology</li> <li>Malawi Medical Journal</li> <li>Sri Lanka Journal of Psychiatry</li> <li>Croatian Medical Journal</li> <li>Revista Colombiana de</li></ul> |  |
| Management <li>Fungal Diversity</li> <li>Journal of Conflict Resolution</li> <li>Learned Publishing</li>                            |     | Estadistica  |  |

### 

# More things to consider

- Stay away from 'predatory' journals
- Look for verifiable claims
- Understand the Open Access model
- Don't be swayed by the Impact Factor
- Care about your audience

From Ravi Murugesan – 'How to choose a journal that's right for your research'

- Understand indexing databases and metrics
- Read the Aims and Scope
- Read the Instructions to Authors
- Write a cover letter

From Duncan Nicholas – 'How to choose a journal and write a cover letter'





## Writing (Macro) the structure of your paper

#### **OPEN PRAXIS**

Open Praxis, vol. 9 issue 1, January-March 2017, pp. 45-57 (ISSN 2304-070X)



#### A MOOC approach for training researchers in developing countries

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#### Abstract

We report on an online course in research writing offered in a massive open online course (MOOC) form for developing country researchers. The concepts of cognitive presence, teacher presence, and so presence informed the design of the course, with a philosophy of strong social interaction supported by gu facilitators. The course was developed with low-bandwidth elements and hosted on a Moodle site. It v offered twice as a MOOC and 2830 learners from more than 90 countries, mainly in the developing wo took part. The average completion rate was 53%. Female learners and learners who were active in the foru were more likely to complete the course. Our MOOC approach may be a useful model for continu professional development training in the developing world.

Keywords: MOOC: higher education; researchers; developing countries; continuing professional developme Moodle

#### Introduction

Knowledge advances through scholarly research, and communication is essential for t advancement to happen. However, researchers in developing countries face multiple challenges publishing their work in peer-reviewed journals; they often lack access to mentors, have limit opportunities for research funding, have poor access to literature (Nchinda, 2002), and lack traini in research writing skills (Langer, Díaz-Olavarrieta, Berdichevsky & Villar, 2004). There is a bas "information inequality" in knowledge of publishing practices (such as open access), internation ethical standards, and exploitative practices such as so-called "predatory journals" (Jones, 201 Researchers in the Global South may be detached from the information-rich dialogues on schola publishing that tend to take place in the North (Nobes, 2016a). Despite lacking access to continui professional development (CPD) training in research communication, developing country research are driven by the same "publish or perish" culture as in developed countries, and they remain acute aware of the importance of scholarly research on their countries' development.



**OPLOS** ONE

#### OPEN ACCESS

Citation: Bezuidenhout L, Karrar O, Lezaun J, Nobes A (2019) Economic sanctions and academia: Overlooked impact and long-term consequences. PLoS ONE 14(10): e0222669. https://doi.org/10.1371/journal.pone.0222669

#### RESEARCH ARTICLE

#### Economic sanctions and academia: Overlooked impact and long-term consequences

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#### Abstract

Financial sanctions are often thought of as the "soft alternative" to armed conflict and are widely used in the 21<sup>st</sup> century. Nonetheless, sanctions are often criticized for being nonspecific in their action, and having impact beyond their intended remit. One often-overlooked area affected by sanctions are academic systems of research and education. Sanctions place "invisible barriers" for research in these countries by limiting access to necessary resources and curtailing their effective use. In this paper we present a national survey of Sudanese academics focused on the impact of 20 years of economic sanctions on their work. It identifies key areas of academic research and education that have been impacted by international sanctions. Moreover, these data highlight how the impact of sanctions on academia is likely to persist long after they are formally lifted. The paper concludes by problematising the current interpretation of jus post bellum, or moral behaviour after conflict. It



# The IMRAD Format

- Introduction:
- Methods:
- Results:
- And
- **D**iscussion:

Why did you do it? How did you do it? What did you find?

What does it mean? (so what?)

See also – The IMRAD blog series, Barbara Gastel (AuthorAID)



- Rule 1: Focus your paper on a central contribution, which you communicate in the title
- Rule 2: Write for flesh-and-blood human beings who do not know your work
- Rule 3: Stick to the context-content-conclusion (C-C-C) scheme
- Rule 4: Optimise your logical flow by avoiding zig-zag and using parallelism
- Rule 5: Tell a complete story in the abstract

From "Ten simple rules for structuring papers" – Plos One

# 

#### Some tips on introductions

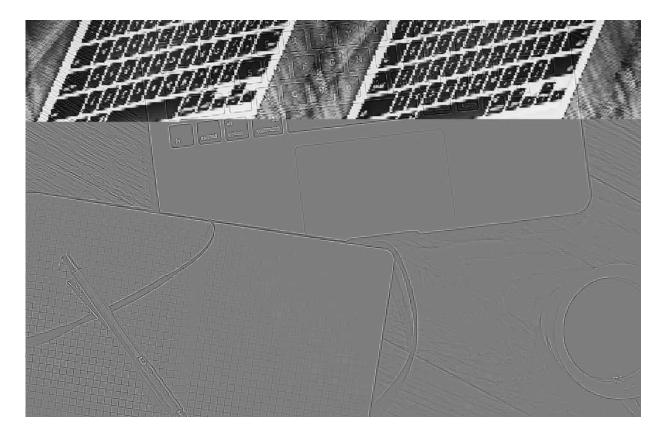
#### "Justify, justify, justify!"

- The fact that it simply hasn't been done before is not reason enough - we need to understand what the value is.
- The fact that there is not enough (or no) data available on the topic is also not justification enoughwhy is it important?
- Don't just list what people have done in the past but discuss why it is interesting so readers can see why you built on that.
- Don't speculate or exaggerate! 'The best/the most/the first' - it probably isn't.

Adele Tufford – "7 tips for writing an introduction to a paper"



### The writing itself (The Micro)



# AUTHORAID What about the writing itself?

- Two common errors:
  - -Writing too much (and having to cut down words to fit under a word limit)
  - -Writing too formally/using too much sophisticated language and jargon



# RULES FOR USING



#### **KEEP SENTENCES SHORT**

Most long sentences can be broken up. Use 15-20 words for each sentence. Vary the length of each sentence. Have 1 idea per sentence.



#### **PREFER ACTIVE SENTENCES**

Turning a passive sentence into an active sentence means changing the structure. Active sentences are ordered like this: WHO (subject) DID (verb) WHAT (object). For example: 'Anne watched television'. Passive sentences are structured like this: WHAT WAS DONE BY WHO. For example: 'The television was watched by Anne'.



#### USE 'YOU' AND 'WE'

Using 'you' and 'we' helps you focus on WHO DID WHAT. For example: we started the project; we designed the service; you should use the template to record results.

#### **AVOID JARGON**

Jargon is a special language used in business, medicine, science, government and development. It is useful for a specialist audience, but not for a wider audience. Strip your text of jargon by saying exactly what you mean and by using everyday language.



# DON'T BE AFRAID TO GIVE

Instructions help clarify actions. For example: 'Doctors must write down the test results'; or 'download the documents here'.



#### AVOID TURNING VERBS INTO NOUNS

Turning verbs ('doing' words) into nouns (things, concepts, emotions, a person) is called 'nominalisation'. Too many nominalisations make writing long and dull, especially in passive sentences. See examples of nominalisations <u>here</u>.



#### **USE LISTS WHERE POSSIBLE**

Lists, numbers and headings are your friends. They help tidy the text and signpost the reader. Remember to use digits for all numbers and percentages.



Source: How to write in plain English. www.plainenglish.co.uk @PlainEngCam

Designed by <u>Nilam McGrath</u> <u>@TalkingEvidence</u> for <u>AuthorAID</u>



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### USE 'YOU' AND 'WE'

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#### Active voice and 'we'

- The workshop was facilitated by Andy.
- Andy facilitated the workshop.
- It was decided by the governor that the assistance to the project was to be suspended.
- The governor suspended the project.
- It is believed by the authors that a time limit must be placed on the exercise by the coordinators.
- We believe that coordinators must place a time limit on the exercise.

#### Connections, transitions and adverbs

| Connecting words |      |         | h |
|------------------|------|---------|---|
| for example      | yet  | also    |   |
| whereas          | when | or      |   |
| because          | and  | such as |   |
| although         | but  | if      | Ā |

| Tran        | sition words           | h  |
|-------------|------------------------|----|
| in addition | firstly, secondly, etc |    |
| furthermore | consequently           |    |
| however     | therefore              |    |
| in contrast | by comparison          | Ц. |
| in summary  | indeed                 | V  |

| Certainty<br>of<br>Conclusion | Modal<br>Verbs/Adverbs   | Statement of<br>Claim  |
|-------------------------------|--|--|
| Strong                        | is, will, can not, must,<br>undoubtedly, always,<br>never, definitely,<br>clearly  | It is certain<br>that<br>It seems clear<br>that<br>X is definitely   |
| Moderate                      | should, would, can,<br>ought to, tends to,<br>usually, likely,<br>probably, regularly,<br>majority, generally,<br>often, frequently,<br>rarely | It appears<br>probable<br>It is usually the<br>case that In<br>the majority of<br>cases<br>The results<br>suggest it is<br>likely that |
| Tentative                     | May, might, could,<br>possible, conceivable,<br>sometimes,<br>occasionally, seldomly,<br>perhaps, maybe,<br>uncertainly, minority              | Conceivably,<br>It is possible<br>that<br>Occasionally,<br>It may be the<br>case that  |

From: UniLearning Academic Writing Guide

#### Academic Phrasebank

#### MANCHESTER 1824

#### Academic Phrasebank

The University of Manchester

| Introducing Work | Referring to Sources | Describing Methods | Reporting Results | Discussing Findings | Writing Conclusions |
|------------------|----------------------|--------------------|-------------------|---------------------|---------------------|
| HOME »           | Being (              | ritical            |                   |                     |                     |

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GENERAL LANGUAGE FUNCTIONS

**Being Cautious** 

Being Critical

**Classifying and Listing** 

**Compare and Contrast** 

**Defining Terms** 

**Describing Trends** 

**Describing Quantities** 

**Explaining Causality** 

**Giving Examples** 

Signalling Transition

Writing about the Past

An enhanced and expanded version of PHRASEBANK is available in PDF or Kindle format:



ABOUT PHRASEBANK

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As an academic writer, you are expected to be critical of the sources that you use. This essentially means questioning what you read and not necessarily agreeing with it just because the information has been published. Being critical can also mean looking for reasons why we should not just accept something as being correct or true. This can require you to identify problems with a writer's arguments or methods, or perhaps to refer to other people's criticisms of these. Constructive criticism goes beyond this by suggesting ways in which a piece of research or writing could be improved.

... being against is not enough. We also need to develop habits of constructive thinking. Edward de Bono

#### Highlighting inadequacies of previous studies - close

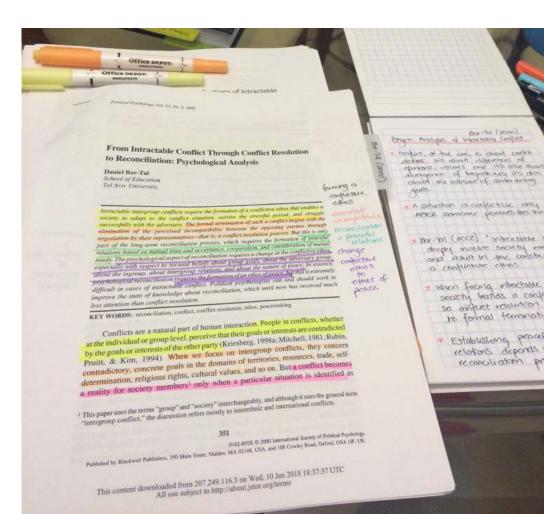
Previous studies of X have not dealt with ... Researchers have not treated X in much detail. Such expositions are unsatisfactory because they ... Most studies in the field of X have only focused on ... Such approaches, however, have failed to address ... Previous published studies are limited to local surveys. Half of the studies evaluated failed to specify whether ... The research to date has tended to focus on X rather than Y. Previously published studies on the effect of X are not consistent. Smith's analysis does not take account of ..., nor does she examine ... The existing accounts fail to resolve the contradiction between X and Y. Most studies of X have only been carried out in a small number of areas. However, much of the research up to now has been descriptive in nature ... The generalisability of much published research on this issue is problematic.

#### From Academic Phrasebank, University of Manchester

# AUTHORAID The best way to learn writing...

"...reading is an integral part of writing, and ... if we don't read, and make time to read, we will probably not be able to situate our scholarship within the global scholarly literature"

Raul Pachego-Vega "Legitimising reading as a crucial component of academic writing"





# Avoiding plagiarism

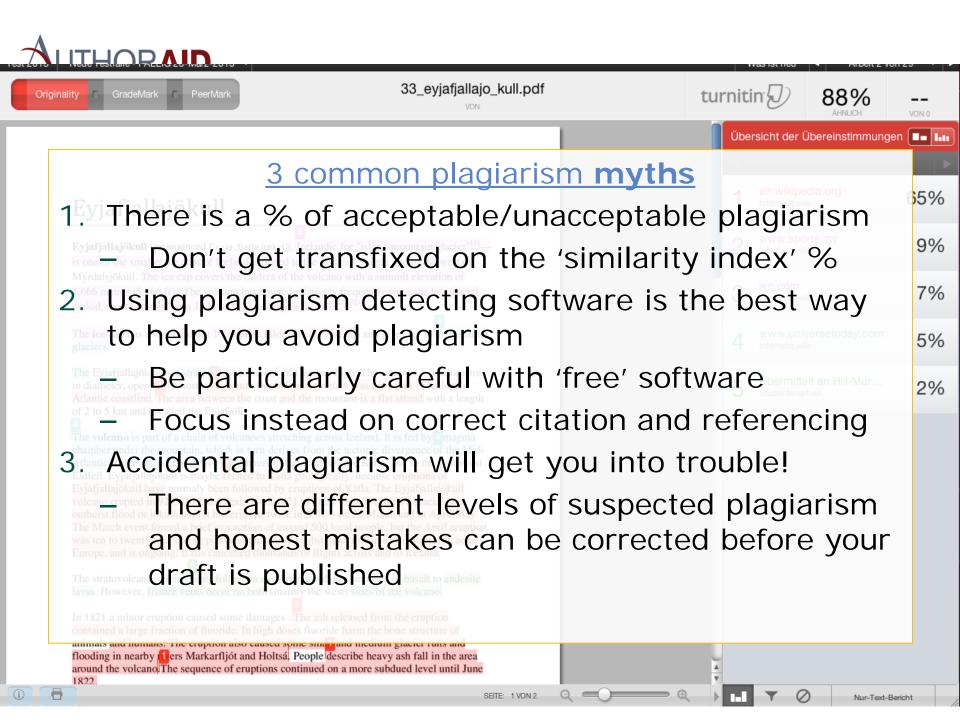


#### Plagiarism

#### <u>Definition</u>

"... the use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission and presenting them as new and original rather than derived from an existing source."

The World Association of Medical Editors<sup>4</sup> (WAME)



#### 

### How to avoid plagiarism

- Cite every source from which you took an idea, fact, text or figure, whether it is an article, book, blog, preprint or thesis. Only cite sources you read and not the sources they cite, unless you've also read them.
- If you use exact (verbatim) wording, citation alone is not enough. You'll need to **quote and cite**, e.g:
   'As shown previously, "This is copied text." (Smith et al., 2017)'.
- When making notes, record the source and use quotation marks for directly copied wording.
- Don't reword text close paraphrasing is still plagiarism. Use your own words or quote their exact wording.
- Using the same 'Methods' wording can be okay, but make sure you cite and attribute – e.g: 'The methods and their description are adapted from Smith et al. (2017)'

From "How to avoid being accused of plagiarism", Matt Hodgkinson



# Paraphrase or Plagiarism?

# Original text – (Hutteten et al. 2015)

As a topic, geoengineering entered the policy sphere earlier in the USA than in the other countries. The oldest document we found was a hearing in the US House of Representatives from 1997 where a scientist mentions geoengineering as a topic worth exploring in response to climate change. In the USA the following references were from 2007 in hearings related to the environment, energy and resources. It is not until 2009 that thorough reports were made by the House of Representatives, Congressional Research Service and Government Accountability Office. An important characteristic of the American geoengineering discussion is the presence of lobbies and think tanks, some of which advocate fiercely for research or even deployment of geoengineering. In the UK, the House of Commons has published two committee reports on geoengineering, the first in 2008 as a part of a larger inquiry, 'Engineering in Government' and a second which focuses solely on the governance issues, 'The Regulation of Geoengineering', in 2010.

# Reference 1

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#### **Verdict:** Plagiarism

| abc | Original text |
|-----|---------------|
| abc | Deleted text  |
| abc | Added text    |

# Reference 2

As a topic, Geoengineering-entered came to the policy sphere earlier in the USA than in the other countries. The oldest document we found example was a hearing in the US House of Representatives hearing from 1997 where a scientists mention that geoengineering as a topic is worth exploring in as an important topic, particularly in response to climate change. In the USA there were a number of the following references were from 2007 in hearings related to the environment, energy and resources. In is not until was only in 2009 that House of Representatives, Congressional Research Service and Government Accountability Office made thorough reports about geoengineering were made by the House of Representatives, Congression is the presence and role of lobbies and think tanks, some of which who are strong advocates fiercely for research or even and deployment of geoengineering. In the UK, the House of Commons has published two committee reports on geoengineering, the first in 2008 as a part of a larger inquiry, 'Engineering in Government in 2009. (Huttunen et al 2015)

| abc | Original text |
|-----|---------------|
| abc | Deleted text  |
| abc | Added text    |

#### **Verdict: Poor paraphrasing/plagiarism**

# Reference 3

<u>Huttunen</u> et al (2015) note that geoengineering became part of USA policy discourse at least 10 years before it become part of UK policy discourse. They claim that the first mention of geoengineering in USA <u>policy-making</u> was in 1997, with the UK's parliament beginning discussions in 2008. Their study is important as it not only highlights geoengineering's link in the USA to "the environment, energy and resources" (2015: 19), but also highlights a dominant part of those early discussions, namely "the presence of lobbies and think tanks" (2015: 19).

| abc | Original text |
|-----|---------------|
| abc | Quoted text   |
| abc | Added text    |

#### Verdict: Good, well referenced paraphrase



# Writing productivity



### Writing is hard work!

What techniques do you use?

- Writing sprints 20 minutes to 1 hour. (Pomodoro Technique)
- Collaborative writing
- Set aside a specific time to write (switch off phone, TV, internet)
- "Enjoy writing badly." Karen Russell.
- "You can't edit a blank page" Jodi Picoult.

See also "Writing tips – finding time to write and motivation" - with Kate Maxwell and Petra Boynton (video)



### Counter-intuitive writing tips

- Productivity is personal (and your colleagues and supervisors might be wrong)
- Lots of writing time doesn't lead to lots of writing
- Writing less is one of the best things you can do for your productivity
- Doing 'more research' isn't always conducive to your success
- Accept that your writing practice will change over time
- Done is always better than perfect
- Dedicate less time to writing (and more to reflection)

From "10 Counter-intuitive insights from an academic writing coach" – Chris Smith



# **Questions?**



# **Recommended resources**

#### List of resources mentioned in this presentation (part 1)

- How to avoid being accused of plagiarism by Matt Hodgkinson <u>http://www.authoraid.info/en/news/details/1238/</u>
- Dealing with Peer Review Dr Carole Sargent
   <u>http://www.authoraid.info/en/news/details/1248/</u>
- Peer review: the nuts and bolts by Sense about Science <u>http://senseaboutscience.org/activities/peer-review-the-nuts-and-bolts/</u>
- Ways to improve your academic writing and editing (part 1) by Rachel Strohm <a href="http://www.authoraid.info/en/news/details/1217/">http://www.authoraid.info/en/news/details/1217/</a>
- IMRAD blog series by Barbara Gastel <u>http://www.authoraid.info/en/news/details/1132/</u>
- Academic Phrasebank Manchester University <u>http://www.phrasebank.manchester.ac.uk/</u>
- Legitimising reading as a crucial component of academic writing- by Raul Pachego-Vega <u>http://www.raulpacheco.org/2018/01/legitimising-reading-as-a-crucial-component-of-academic-writing/</u>

# **Recommended resources**

#### List of resources mentioned in this presentation (part 2)

- Ten simple tips for structuring papers (Plos One) https://doi.org/10.1371/journal.pcbi.1005619
- Seven rules for writing in Plain English by Nilam Ashra-McGrath <u>https://www.slideshare.net/comdishsd/7-rules-for-writing-in-plain-english-44037458</u>
- UniLearning Academic Writing Guide
   <u>https://unilearning.uow.edu.au/</u>
- Purdue University's Online Writing Lab <u>https://owl.purdue.edu/owl/purdue\_owl.html</u>
- Plagiarism and ESL Writers: An Overview (Purdue) <u>https://owl.purdue.edu/owl/english\_as\_a\_second\_language/esl\_students/plagiarism\_and\_e\_sl\_writers.html</u>
- A brief guide to the international research landscape by Andy Nobes <u>https://www.authoraid.info/en/resources/details/1351/</u>
- A beginner's guide to avoiding 'predatory' journals (using your critical thinking skills) by Andy Nobes

https://www.authoraid.info/en/news/details/1310/

# **Recommended resources**

#### List of resources mentioned in this presentation (part 3)

- Think.Check.Submit <u>http://www.thinkchecksubmit.org</u>
- Ravi Murugesan 'How to choose a journal that's right for your research' <u>https://www.scidev.net/global/publishing/practical-guide/target-journal-right-researchcommunicate-publish.html</u>
- Duncan Nicholas 'How to choose a journal and write a cover letter' <u>https://dx.doi.org/10.4103/sja.SJA\_691\_18</u>
- Writing tips finding time to write and motivation Petra Boynton and Kate Maxwell <u>https://www.youtube.com/watch?v=XRHQvFhTITA</u>
- Directory of Open Access Journals (DOAJ) <u>www.doaj.org</u>
- JANE <a href="http://jane.biosemantics.org/">http://jane.biosemantics.org/</a>
- Clarivate Web of Science (Journal Citation Reports) Master Journal List: <u>http://mjl.clarivate.com/</u>
- Scopus <u>https://www.scopus.com/sources</u> & Scimago <u>http://www.scimagojr.com/journalsearch.php</u>
- Pubmed (medical journals). <u>https://www.ncbi.nlm.nih.gov/nlmcatalog/</u>