Writing for Peer-Reviewed Journals

Programme

Where to get a handout

- Publishing: Career Considerations
- Publishing Strategy
- Journals and Editors
- Structure of a Paper
- How to Write a Paper Quickly
- Readability
- Refereeing
- Writing Habits
- Reading List

Introduction

This course helps you to develop an effective personal strategy for writing and publishing peer-reviewed journal articles. The course takes a problem-solving approach. You should leave it able to solve problems in the following areas:-

- Publishing goals and strategy.
- Why you should publish peer-reviewed journal articles.
- Citations and Impact Factors
- Choosing a journal.
- Choosing a Title.
- Structure of a journal article.
- How to write a journal article quickly.
- The abstract
- Where the message comes from: Results, Figures, tables.
- Methods, Introduction, Discussion and Conclusion
- Fine structure: Sections, Paragraphs and Sentences
- How to get the best out of Editors, Referees and Co-Authors
- Establishing a pipeline for journal articles.

Participants are welcome to bring problems or work in progress for discussion.
Career Considerations

- Why publish?
- Publications and Research Grants
- Publications and Promotion
- Co-Authors
- The REF
- Strategy

Why Do We Publish?

And How should that Influence our Strategy?

- Altruistic reasons
  - So humanity can benefit from your research.
  - If it’s not published it might as well not have been done.
- More practical reasons
  - To change what people believe
    - Which people?
  - To contribute to a conversation
    - What Conversation?
    - With whom?
  - To enhance your reputation as a researcher
    - Help you get an academic job/promotion
    - Help you get a research grant
  - To participate in the REF?

Career Considerations

Publications and Jobs and Promotion

- What are appointment and promotion committees looking for? . . .
- Point to consider:-
How would publications show these things?

- Lecturer - Have you got an independent research agenda?
  - Do you look as if you will be a professor in 5-10 years?
  - Will you have a REF return?

- Reader - Academic Impact, Early Leadership
  - Is your research agenda influencing your field?
  - Are you helping others set their research agenda?

- Professor - Leadership
  - are you defining an agenda that others are following?

Citations and h Index?
Journal???
  - “Where is your Nature paper?”

Career Considerations

Publications and Research Grants

- Why do research funders care about publications?
  - Competence - for any research project.
  - Leadership and Academic Impact - for Fellowships
  - Societal Impact - for applied projects

- Factors that demonstrate competence
  - Journal choice
    - International
    - Subject defining (which conversations does it support)
    - Exclusivity is risky
  - Authorship order.
    - What does it indicate?

- Factors that demonstrate Leadership & Academic Impact?

  Similar factors to Promotion
Societal Impact?
- Different journal choice
- Important to some funders

Career Considerations

Co-Authors

Value of Co-Authors

1. They do some of the work
2. They absorb some of the credit.
   - The extent to which they do these things varies with
     - Their seniority relative to you
     - Their position in the author list
       * Very senior authors can absorb all the credit from any position in the author list.
       * And often they do no work.
   - Risky to publish consistently with senior co-authors unless
     - You have a different senior in each paper.
     - You get to be first author at least half the time.

   - It's still risky.

Career Considerations

The REF

- Distributes about £1.6 billion per year (i.e. NOT meant for league tables)
- 65% Outputs (Publications) (20% Impact; 15% Environment)
  - 4 Outputs per academic in 2014 with reduction at early career stages
- Quality depends on
  - Originality
  - Significance
  - Rigour

- Ratings
  - 4* “World Leading”
  - 3* “Internationally Excellent”
  - 2* “Internationally Recognised”
  - 1* “Nationally Recognised”
  - Unclassified (below Nationally Recognised)

- How would you measure originality, significance and rigour?
- Entries classified by percentage of “work” in different grades
  - Profile (%4*, %3*, %2*, %1*, %UC)
- Funding per academic weighted by Profile (4, 1, 0, 0, 0)
Profiles are used for league tables

Open Access

Career Considerations

Open Access

• Publication can be read and text-mined without cost
• Increases visibility of papers
• Required for REF eligibility if published after 2016
  – 2 Variants

• GOLD
  – Publication is available on-line without cost
  – Requires payment to publish
  – Creates opportunity for predatory journals

• GREEN
  – Journal costs money
  * On-line version is free after embargo period < 1 year -OR
  * Final refereed version of paper is placed in open-access repository within 3 months of publication.

Career Considerations

Originality, Significance and Rigour

- Originality

  – Other people have not answered this question.
  – Maybe they have answered it but you have answered it better?
  – Maybe your method is new?
  – Is your paper significant?

- Significance

  – The question is significant: many people want to know the answer.
    * So is your paper original?

- Rigour

  – Research Questions
  – Applications
Your research methods are impeccable.

Strategy

Why a strategy helps

What a strategy entails
  – Picking Research Questions
  – Framing The Answers
  – Picking Journals
  – Dealing with Editors Pre-submission
  – Developing a Pipeline

Why a strategy helps

• If your actions now can influence your future you can have a better future if you act strategically.

• Getting jobs / Getting promoted
• Getting grants
• Getting people to interact (academically) with you

Research Questions

• The questions your research addresses are the main factor that determines the originality and significance of your papers.

  Topic

  – Are other people addressing the same topic?
    * If they are

  – * Is your question original?
    * Original (and improved) approaches to established questions may help - But they might undermine vested interests
    * If they are not

  – * Is your question significant?
    * New questions opened up by existing answers or theories are good.
    * But they might undermine vested interests
    * Are there Journals that will be interested?

    – Is there a potential benefit to society?
      * Does society know?

  Style of Question
- Frame the question so that the answer is interesting, however it turns out
- Say how the question you address relates to questions being asked by others.

**Answers**

- The methods you use to answer your question determine the **rigour** of your papers.

...  

**Style of Answer**  

- Answers that attack other researchers or make them look foolish are bad strategy  
  * People that you belittle in your papers may referee your papers and grants  
  * Disciplines with internal disagreements look bad from outside - bad for funding  
- Better to make out that you stand on the shoulders of giants  
- Answers that open up questions that others will be interested in are especially important and will increase the **significance** of your papers.  
  * This is a good way to discuss previous papers  
  - it increases their significance and yours.

**Strategy**

**Journals and Editors**

- Journals?  
- Editors  
- Publications and Promotion  
- The REF  
- Strategy

**Picking a Journal**

- Very high status  
  - High **Impact Factor**  
  - Very broad coverage
  - Very high rejection rate  
  * May be nothing to do with quality  
  - May have very low word limit.

...  

- Very low status  
  - “Foreign” or “International”?  
  - Narrow subject area  
  * Pinnacle or backwater
  - Nobody you admire publishes there

...  

- Questions to ask  
  - Are the questions I deal with relevant to the readership?  
  * Will my papers reference a lot of papers from this journal?  
  - **Do the people I want to read my paper read this journal?**  
  - Do I read it regularly?
– Do people I admire publish here?
– Does this journal define my subject?
  * Does it figure in the reading lists I give my students?

Back to Strategy

Editors

• How should you engage with editors?
  – Some people advise it
    * Pre-submission enquiry
    * But there are do’s and don’ts
    * Not all editors are helpful

  . . .

  • My recommendation
  – Consider their perspective
  – Don’t expect too much
  – Remember that there are lots of journals.
    * And lots of writers...

Journals and Editors

Impact Factor

• Measure of the influence of a journal.
  – Average number of citations of papers in the last 2 years.
    * Numerator = total number of citations (in Thomson Scientific indexed journals) in year x.
    * Denominator = total number of papers deemed to be citable in years (x-1) and (x-2).
    * Journals negotiate to reduce the denominator.

• Value of impact factor (IF)

  . . .

  – Designed for libraries trying to make rational choices about buying journals.
    * Journal with high IF likely to have a lot of highly cited papers.
  – Very poor predictor of the likely quality (number of citations) of a paper.
    * Most papers in high IF journals have tiny numbers of citations.

Journals and Editors

Citations

  . . .

  • Why you should cite

  . . .

  – Assign credit to other relevant works
  – Show that your paper fits into an ongoing debate
  – Tit for Tat?

  . . .

  • Why you want to be cited
• It shows that your papers are contributing to a debate that is continued by others.
  – Most papers are never cited
  – h index is an indicator of your integrated contribution
    * You have \( h \) papers with at least \( h \) citations
  – h index can be gamed
    * When does a sensible citation strategy turn into fraud?

Readability

• Make your language as simple as it can be
  – Make the reading effortless.
  – Complex language is unnecessary unless you have nothing to say.
• And as precise as it can be
  – Use quantitative expressions (not just numbers)
• Don’t surprise the reader
  – Don’t give them unexpected information
  – Don’t deliver similar information in different ways

• NO SYNONYMS

• NNIUTDNE

• No novel initialisations unless they don’t need expansion.
  – Some journals ask for them BUT THEY ARE WRONG.

• Avoid coded references (Experiment 1) if possible.

• Tell the reader what is coming (No Surprises)
• At Paper level
  – Start the paper by saying what the paper does
  – Start each section with a summary sentence
    * Avoid “meta-text”.
• At paragraph level
  – Start each paragraph with the topic sentence.
    * Write the topic sentences as simple statements.

Structure of a paper

• Title
• Abstract
• Introduction
• Materials and Methods
• Results
• Discussion
• Conclusion
• Generic Structure of a Section

Recipe for Writing a Paper

Titles

• It must tell someone enough that they know whether the paper has something to say to them.

... 

• How informative is your title?

... 

- Will an outsider know what your paper is about?

... 

- Does it contain important key-words?

... 

- Does it say what your paper does?

... 

- Does it tell them too much?
  * Some people believe that you shouldn’t give away the main result. What do you think?

... 

- Is it an obscure joke or an ironic reference?
  * If so it will tell most people nothing.

... 

• Advice for Social Scientists
  - And here

• Advice for Scientists

Structure

Abstract

• Summarises the Paper
  - 2 structures
    * Sectioned: Maps to Paper
    * All in one section ... 

• When to write it

... 

- When everything else is finished
  - How to Write it
  - Back to Structure

Introduction

• Explains to the reader why they should read the paper
  - Say what the paper shows...
Materials and Methods

- Describe how you did the work;
  - allows the reader to decide whether to believe the results
  - General Methods
  - Methods for each part of the study
  - Advice on Writing it
  - Back to Structure

Results

- Explains how your results support your story.
  - Summary of the findings using the sentences that state each finding.
    * Paper will be easier to read if all these statements have the same structure.
  - Description of each finding and an explanation of how it is derived from your primary research results.
  - How to Write it
  - Back to Structure

Discussion

- Explain what your findings mean.
  - Set them in the context of the literature
  - Lay the foundation for your conclusion.
  - How to Write it
  - Back to Structure

Conclusion

- Explains the Consequences of your study
- Leads to the take-home message
  - How to Write it
  - Back to Structure

The Recipe

1. Work out the Story of the Results
2. Write the Methods
3. Write the Results
4. Write the Discussion
5. Write the Conclusion
6. Write the Introduction
7. Write the abstract
8. Write the Title

Structure

The Story of the Results

How you work it out

- **Storyboarding**
- Express each main finding as a single sentence
  - Each figure or table.
  - The sentence should be intelligible without detailed knowledge of your study.
  - If sentences have the same structure that is better than gratuitously switching structures around.
- **Arrange as many of the sentences as you need to make the best story you can.**
- Don’t try and make the story too long or complex
  - Aim to contribute to the conversation, not terminate it!
- 2 short papers usually does better than 1 long one
  - Quicker refereeing
  - More people read them
  - More people cite them

Recipe for Writing a Paper

**Generic Structure for a Section**

- **Introductory Paragraph**
  - Summarise the section in a single sentence.
  - Expand the summary with a sentence or bullet for each subsection
  - Link To first subsection
- **Middle Paragraphs**
  - State the message of the paragraph in ONE SHORT SENTENCE
    * This is the ‘topic sentence’.
  - Explain it or justify it.
    * These sentences must ‘flow’ so the paragraph is easy to read.
  - Link to the next para.
- **Closing Paragraph**
  - Recap or wrap up.
  - Link to the next section
- **Topic sentences on their own should make a good summary.**

Recipe for Writing a Paper

**Writing the Materials and Methods**

- Should contain all the information needed to replicate your study
- Logical structure
- Precision
- Some people write it while doing the work
- May need editing when you know what results are usable
  
- Can recycle between papers (with citation)
  - “Methods are as described in (xxx). For convenience, we describe them here.”
Recipe for Writing a Paper

How to write the Results

- Work out the story of the results as a set of key statements.
- Use the key statements to introduce the results.
- Then
  - For each result
    * State the result in descriptive form
    * State which figure shows it
    * Describe the figure
    * Explain what features of the figure show the result and how they show it.
    * Link to next finding
- Then link to the discussion
- What to write next?
  - The Discussion

Recipe for Writing a Paper

How to write the Discussion

- State which findings need comment.
  - Comment on each one in relation to the literature & the introduction.
- Standardise the format of your comments.

Recipe for Writing a Paper

How to write the Conclusion

- If you already know the take-home message, tie it to your discussion.
- If you don’t, try the following moves to work it out:-
  - Go back to the reader’s starting point
  - Summarise
  - Now what?
  - So what?
- Advice from Pat Thomson’s blog

Recipe for Writing a Paper

How to write the Introduction

- Write it last.
- Start with a sentence that says what question the paper asks without giving the answer “This paper examines..”
- Explain to your target reader how what has been done previously makes it important to do what you have done in this paper
- Describe in very general terms how you ask the question.

Recipe for Writing a Paper
How to write the Abstract

- Cut and paste ‘topic sentences’ from rest of paper
- They should tell the story of the paper in a simple logical way.
  - If they don’t, you need to do some paragraph re-planning
- Throw away the ones you don’t need

Recipe for Writing a Paper

Title Exercise

- Write out the title of one of your papers (one you have written or one you propose to write).
  - Give it to your neighbour
  - Ask them to write down
    * The topic of the paper
    * The research approach
    * The main result

Referees

- Emotion doesn’t help you get published
  - Get rid of any anger before you start.

- Assume the referee is trying to help improve the paper

- Revisions (many journals require something like the following)
  - Make a full list of recommended changes
  - Integrate them across referees
    * Reconcile conflicts intelligently
  - Write a note about how you will deal with each recommended change.
    * If you think a change makes the paper worse, think about how you might deal with the problem in a way that makes the paper better, or not much worse.
  - Write a resubmission letter in which you express appreciation for the comments (the less you have changed the more you should grovel)

- Dealing with Rejection
  - Work out the reason.
  - Wrong Journal
    * Try a different journal
  - Poor paper?
    * Rewrite and try again.

- What about doing some refereeing?

Strategy

Pipeline

- Know what you need to do to keep your personal paper pipeline flowing.
- Make sure you allocate enough time to writing
- Consider the advantages and disadvantages of parallel projects.
- Respect the needs of your co-authors
  - Make it easy for them to deal with you
  - If it takes them a long time to do their bit find out if you could be part of the problem.
  * Do you leave the paper in a state where it’s not much fun to work on?
- Don’t let co-authors slow you down.

Discussion questions
- Which of these is problematic for you? What are your solutions to these problems?
- What other problems do you see?

Strategy

Reading

There is a huge amount of advice out there. Don’t believe all of it. Most good advice is just applied common sense, so advice that seems like nonsense could well be nonsense. Advice that seems sensible could also be nonsense. Always look critically at the reasoning on which the advice is based.

The following books look useful, particularly for their particular target group.

- **Katz - From Research to Manuscript**
  - A detailed guide to writing a scientific paper. Includes how to prepare figures and tables.
  - Aimed at scientists who are already producing results. Advice on choosing a journal is naive.
  - Pat Thomson’s blog gives better advice which also applies to scientists.
  - Step by step guide, starts from the basics. Focused on the Humanities.
- **Scientific Paper Writing - A Survival Guide; Bodil Holst**
  - A good general guide on publishing papers for scientists.
- **Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded**
  - General advice on writing for scientists
- **Writing for Peer Reviewed Journals, Pat Thomson and Barbara Kamler**
  - Good advice for Social Scientists, much of which generalises to science and the humanities.
  - Pat Thomson also has an excellent blog on writing.