Workshop

Optimizing Writing Strategies for Publishing Research in Computer Science

4 – 6 June 2012

EC-SPRIDE,TU Darmstadt
9 am – 4 pm

Program

Day 1

Focus:

- The writing process
- Structural and language norms for scientific/academic texts
- Giving and receiving feedback ("rules")

Overall plan:

- reflecting on your own writing strategies (exercise)
- introductions, setting the framework
- steps in academic text production
- basic structure of a research paper
- examining expectations for texts
- practising the writing process (exercise)
- achieving a precise research question (exercise)
- formulating scientifically and precisely (exercises)
- giving and receiving (peer) feedback (exercise)

Day 2

Focus:

- internal structure of research papers → norms (with exercises)
- language norms and pitfalls (with exercises)
- working on your texts: peer review procedures
- useful resources

Day 3

Focus:

- writing an Abstract under guidance and with feedback

Jana Kaiser BSc (Hons)
kaiser@academic-texts.de

Steps in academic text production

This is a general review of all the steps involved in producing a substantial amount of scientific text. Academic writing is an iterative process, i.e. many of these steps are repeated throughout the course of the process of writing a text (e.g. formulating precise questions, drafting and revising). The final product does not necessarily reflect how many steps were necessary to achieve it.
Note: Leaving steps out may produce more problems than expected!

- **Negotiate a working agreement**
  With the person who supervises and assesses your work, clarify:
  - what is required and when
  - how you will be supervised

- **Orientation and planning phase**
  - setting limits of the topic, developing a research question and making it explicit
  - planning content and time horizons, maybe writing an exposé

- **Researching the literature and other sources**
  - searching for, selecting, and obtaining literature/data
  - reading, summarizing (making excerpts), evaluating the material

- **Structuring**
  - organizing data and material
  - drafting a text structure

- **Writing the first version**
  - formulating ideas according to the structure; ignore language/style at this stage!

- **Revision** (in the order given below)
  - content (comprehensible, relevant, anything missing?)
  - language/style (appropriate, convincing?)
  - formal aspects (footnotes, proofs, citations, etc.: correct and clearly marked?)
  - grammar and spelling (mistakes, typos?)
  - layout (font, margins, format, etc.)

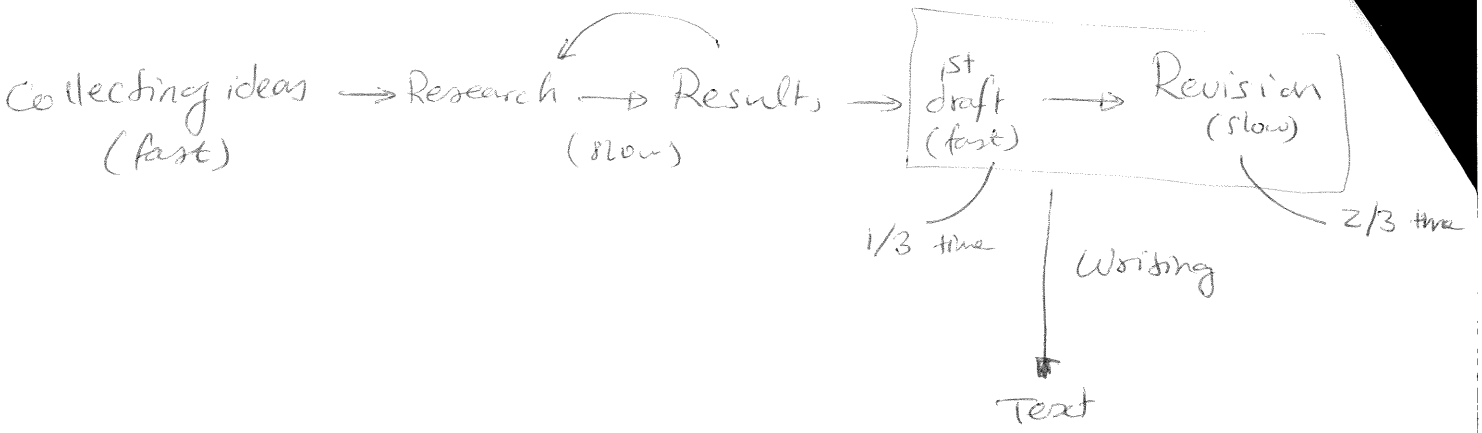
© Gabriela Ruhmann | Schreibzentrum der RUB | 2005/2010 Translation: Jana Kaiser | modified

Schreibzentrum

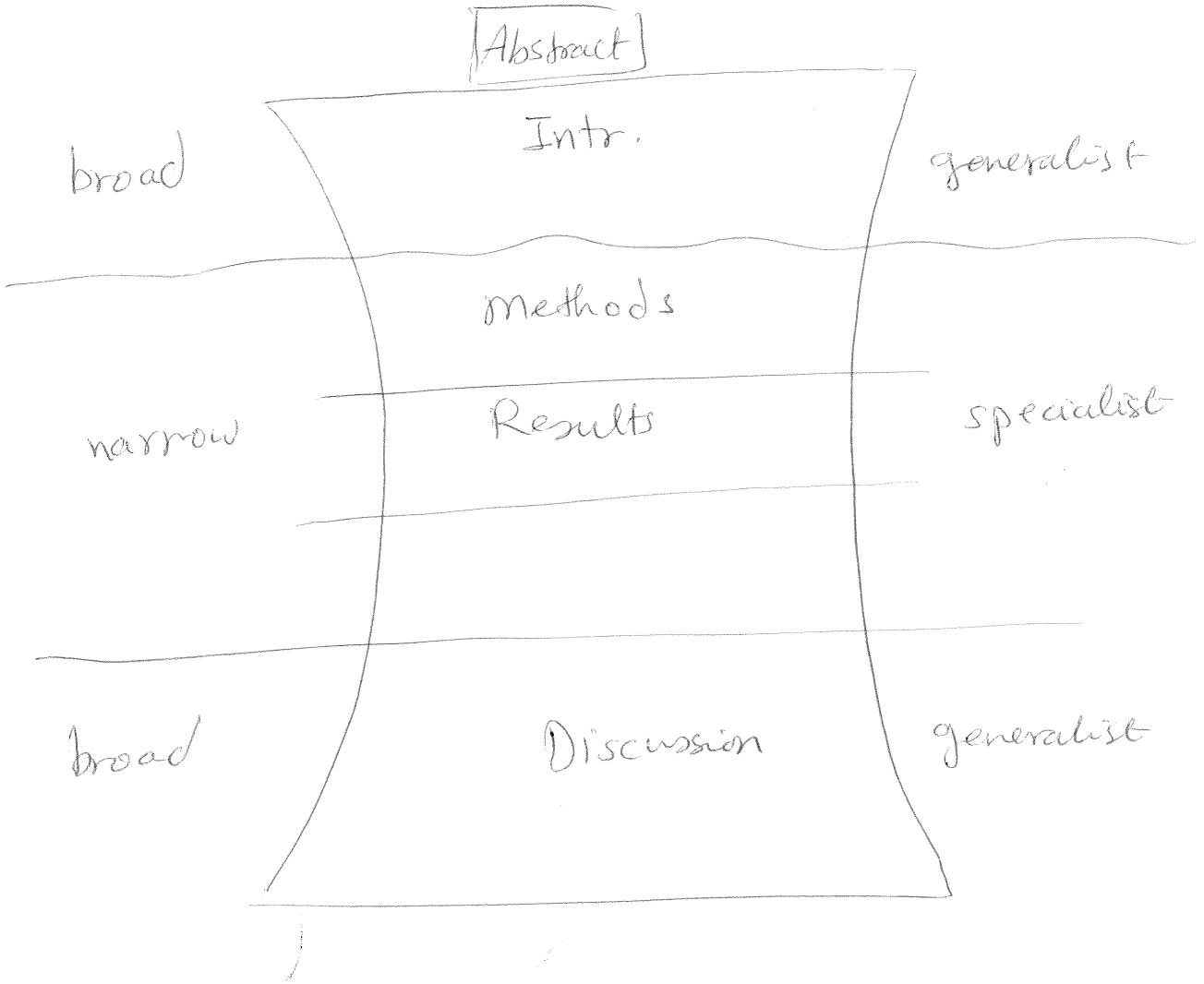
Basic structure of academic publications

- What is the publication about? (research topic, problem)
- Why is it important/interesting to look into this question? (relevance)
- Who found out what about it? (current state of research)
- What has not been found out? Which questions have not been asked/answered before? (gap in research)
- How have I tried to close this gap? (methods)
- What did I find out? (results)
- How is my contribution to be judged in the light of the research done up to now? (discussion)
- What new questions for research arise? (conclusions, desiderata)

© Gabriela Ruhmann | Schreibzentrum der Ruhr-Universität Bochum | 2003


Collecting ideas
(fast)
Research
(slow)
Results
1st draft
(fast)
Revision
(slow)
1/3 time
2/3 time
Writing
Text

Readership


Abstract
Intr.
broad
generalist
methods
narrow
Results
specialist
broad
Discussion
generalist

Readership = audience

– Getting to Know my Readers –

Before you start writing, answer the following questions as precisely as you can:

(specialists)
- Who will definitely read my text? my prof., some colleagues & friends!

(non-specialists)
- Who might read my text? other people in the community, especially people who are working in or interested in that area.
- Who do I want to read my text?
- Who should be able to understand my text? people who have intermediate knowledge in the area / topic.
- Who will I not care about? others
- Whose feedback do I need for revision? experts in the area!
- Who will evaluate the text?

© Dr. Katrin Großmann Schreibberatung Leipzig

Sequence (IMRAD)

(5) Abstract

- Introd. (4)
- Methods (1) easiest
- Results (2)
- And
- Discussion (3)

Discussion : Introduction
(1 : 1) [Issues]

Schreibzentrum

Writing: the basic steps

or:

Creating effective texts efficiently

Step 1: collecting ideas (4 min)
Cluster, brainstorm, free write, etc.; what ideas, thoughts, occur spontaneously? Use keywords, sketches, etc., not sentences!!

Step 2: focussing on your message (8 min)
Which ideas you want to leave out?
How are the remaining ideas connected? Major, minor points
Where do you want to place your emphasis?
In what sequence will you deal with your ideas?
Make conscious decisions about

- the time you have available to complete the assignment
- the amount of text you want/have to produce,
- your audience (readership)
- your goals

Step 3: writing a first draft (15 min)
Now, write "as it comes". Concentrate on putting your ideas into concrete words, making your content visible. This is not the time to worry about structure, style, language, etc. This draft can be "messy"—no one else will see it!
Divide the page vertically; use only the left column.

Step 4: revising for content from the reader perspective (max. 10 min)
Can your thoughts be understood? Is there unnecessary material, should you add material that is missing, does the sequence have to be changed, etc.? Use the right column to make changes.

Step 5: revising for language and style (5 min)
Is the language appropriate and will it please the reader? Check whether your sentences are well-constructed, whether your expressions and terminology are exact/correct, etc. Underline possible vocabulary problems. If you know there is something "wrong", but you don't know how to "fix" it, mark the passage and get help later. Change where appropriate.

Step 6: proof reading (5 min)
Check that grammar, spelling, punctuation, etc. are correct. (may be ⇒ read: down—sup) sentence by sentence
(Depending on the complexity of your text, this step can be integrated into the previous one.)

© Gabriela Ruhmann | Schreibzentrum der Ruhr-Universität Bochum | Translation: Felix Diekhake | modified

Schreibzentrum

- Writing for Specific Readers -

Write an imaginary application for financial support of your research project. Address it to the "Foundation for Everyday Science". Your application will initially be judged by a jury completely unfamiliar with your field of research. The jury needs to be convinced that your project is important, exciting and imaginative. Only if you manage to do this will you be invited to the second round of the selection procedure, in which you will have to convince an expert committee of your project's scientific significance.

It is not important that you write a perfect text. Try to start writing in a relaxed way and let the following questions guide you:

- What are you investigating or what do you want to do research on? Which question(s) are you going to answer?
- Why is it important to investigate this phenomenon / answer this question?
- What have other researchers found out about this phenomenon / related to this question so far?
- How did these researchers find this out?
- What new things have you found?
- What do you hope to discover? How are you going to discover this / these things?
- What would be gained through your discovery?

© Gabriela Ruhmann | Schreibzentrum der Ruhr-Universität Bochum | Translation: Felix Diekhake | modified

Types of errors commonly encountered in papers sent to reviewers:

1. Incorrect usage of singular/plural forms
2. Very complex sentences/inaccurate grammatical structures
3. Non-agreement of verbs and subjects
4. Incorrect choice of preposition
5. Non-standard use of articles
6. Non-standard selection of modal verbs
7. Incorrect choice of parts of speech
8. Non-conventional selection of tense

Types of errors and their possible levels of effect on meaning:

- Rarely / Slightly affect meaning:

  singular/plural, verb-subject agreement

- Sometimes / Moderately affect meaning:

  prepositions, articles, parts of speech

- Often / Seriously affect meaning:

  complex sentences/incorrect grammar, modal verbs, tense

M. Cargill & P. O'Connor *Writing Scientific Research Articles. Strategies and Steps* p. 104 (modified)