Research Capacity Building Workshop
18. Writing a thesis Part 2

The knowledge cycle

WRITE
Summarise and evaluate knowledge

Understand and integrate concepts

Identify key questions not yet answered

READ
Consult knowledge in the field

EXPLORE
Carry out empirical work

Contribute to existing knowledge

Process data and draw conclusions

WRITE
Share new knowledge
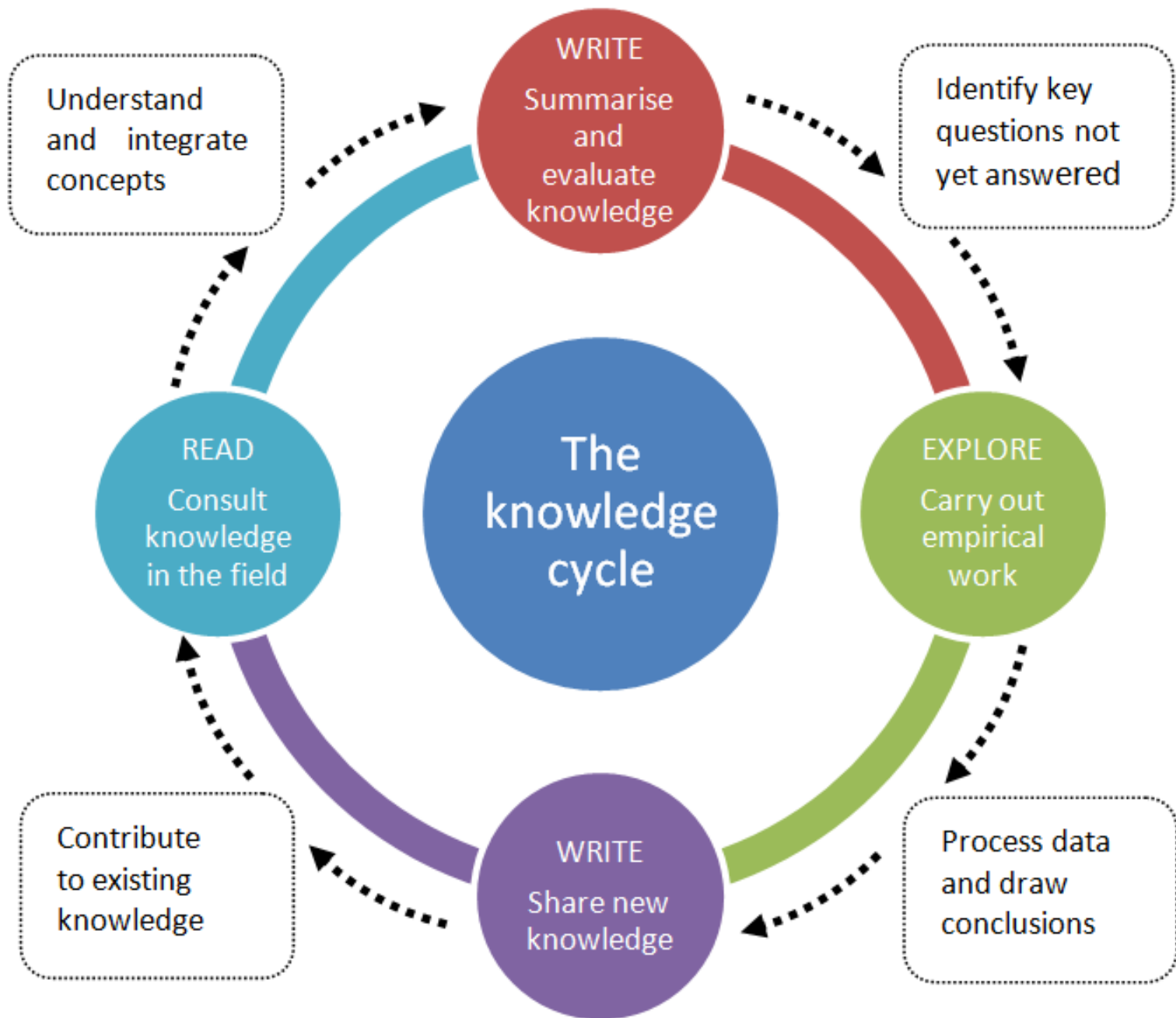
WE ARE HERE

Online Forum

An online forum has been set up at the following web address: http://dutmoodle.dut.ac.za/moodle/

Click on category *RPS Research Capacity Building,* and click on course *Research Matters.*

Materials are posted there online after workshops, including useful articles and books.

To log in:

User ID: staff or student number

Password: research

Once on *Research Matters*, go to the "Social forum", and respond to the message WRITING A THESIS PART 2: 27 July 2012.

Writing a thesis, Parts 1, 2 & 3

Part 1

This workshop will look at the thesis writing process, ways of stimulating creativity on getting initial drafts down, and some traditional (and alternative) ways of structuring a thesis.

Part 2

Structuring a thesis is crucial to how clearly it communicates and therefore to its eventual success. This workshop will look at structural issues and problems which arise as the thesis content is generated, including the issue of decimal numbering (or not).

Part 3

This will look at the "endgame" of writing a thesis, where it is crucial to tie up all the loose ends, finalise the reading, and ensure that the examination copy is printed on time and formatted correctly.

Writing a thesis Part 2

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Essential communicative functions

For communication to occur (effectively):

- Some form of interaction must occur.

- The interaction needs to be set in a context.

- Message content needs to be generated.

- Social requirements need to be observed.

- The whole interaction needs to be regulated by feedback.

System of communicative functions
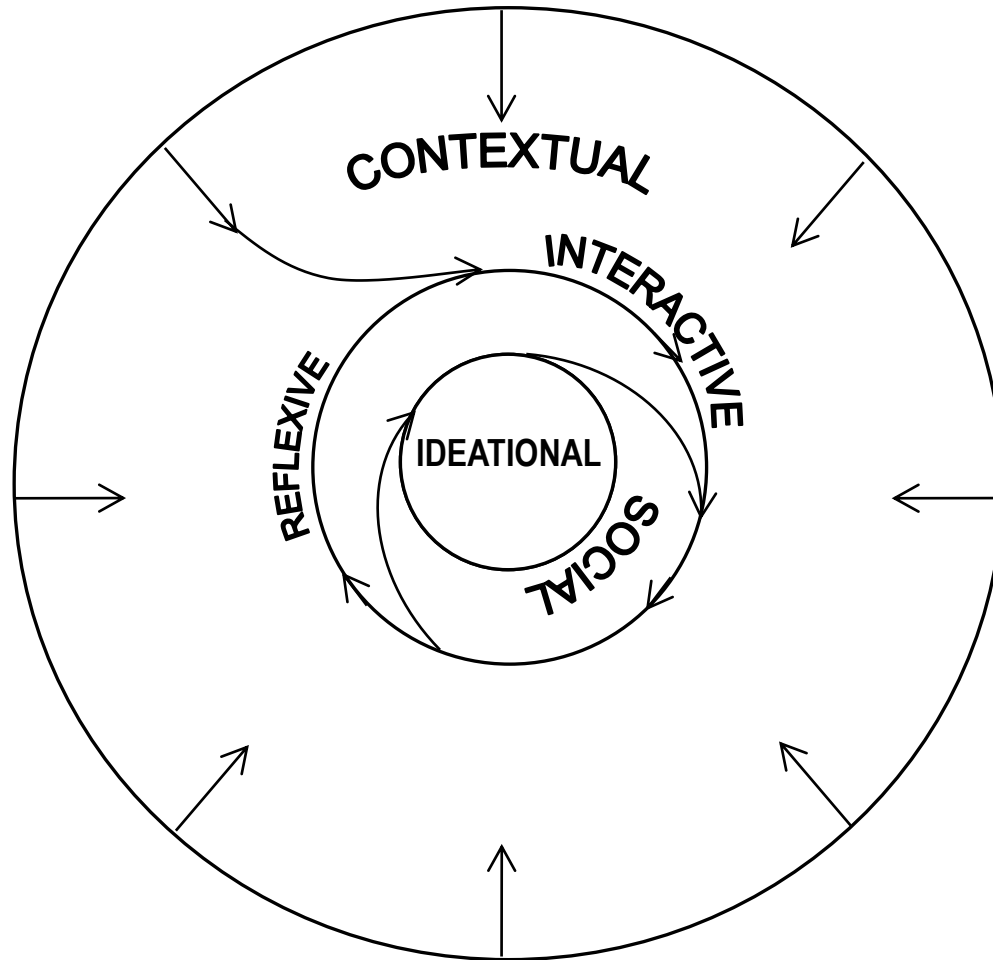
Communicative functions

The functions apply to all communication modes, and not just writing. In speech, the functions are all carried out simultaneously.

In writing, the functions are separated into distinct phases because writing is a delayed interaction: the phases are the "stages of writing" observed by researchers.

The delayed aspect of writing staggers the communicative functions into a recursive process in stages, in much the same way as delayed absorption by litmus paper reveals chemical compounds to be made up of bands of separate elements.
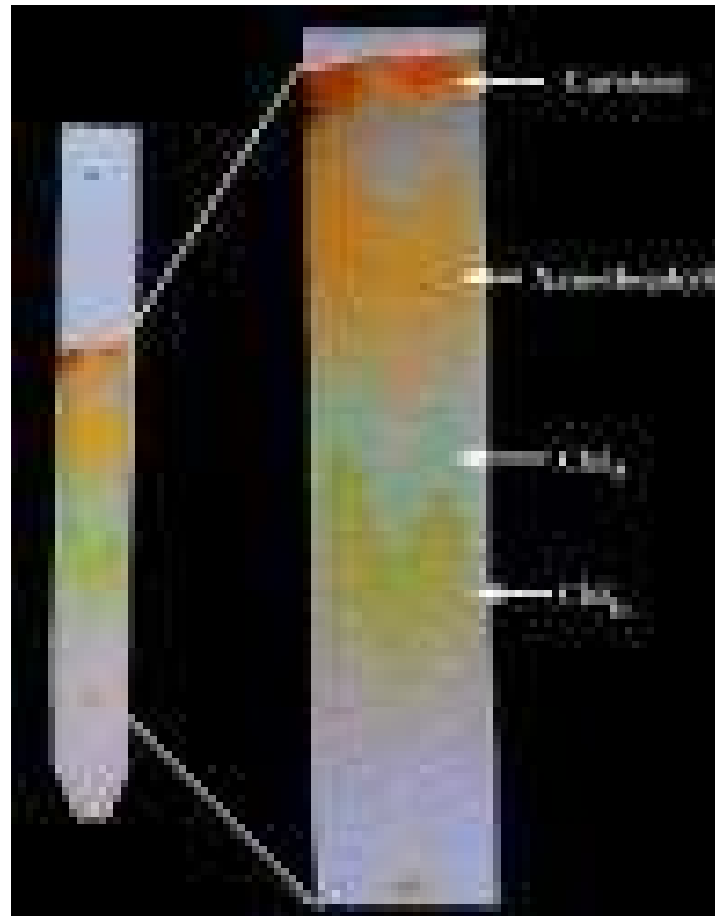
Model of the writing process

STAGES OF THE WRITING PROCESS

1 Prewriting - Consider purpose and reader,
CONTEXTUAL gather data, let it mull round.
- DATA GATHERING

2 Draft writing - Suggest structures or outlines,
IDEATIONAL jot down ideas or fragments,
write larger pieces.
- IDEA GENERATION

3 Major editing - Reread and structure for reader,
INTERACTIVE order, add, delete (go back to 2
if necessary).
- IDEA ORGANISATION/STRUCTURING

**4. Minor editing
and polishing** - Check for correctness, check
SOCIAL format and minor editing
conventions.
- EDITING

5 Evaluation - Assessment (by writer and
REFLEXIVE others) in terms of purpose.
- EVALUATING

R E C U R S I V E

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Structuring is *interactive*

Structuring in writing fulfils the **interactive** function by anticipating and providing content for a reader who is not present to *ask* for necessary information.

It carries out the same function as turn-taking in conversation.

To structure a thesis well means anticipating reader needs and providing for them in advance.

Traditional thesis structure

Traditional thesis structure is used because it answers the obvious questions a reader would ask about your research if they were **talking** to you about it.

The structure in a sense mimics a **live interaction** with your imagined reader.

In a conversation….

If someone wanted to know what your research was about, they would ask you:

- So, what was the topic of your research?
- Briefly, what did this involve?
- Why was all of this relevant?
- What other research had already been done before you started?
- Which left you focusing specifically on….?

…conversation continued

- How did you go about finding this out, i.e.
    - what approach did you take, and
    - what research methods did you use?
- What new information did you find out?
- What conclusions did you come to?
- What further research in that area would you suggest?

Structure echoes reader's needs

- So, what was the topic of your research? [**Thesis title**]

- Briefly, what did this involve? [**Abstract**]

- Why was all of this relevant? [**Introduction**]

- What other research had already been done before you started? [**Literature review**]

- Which left you focusing specifically on….? [**Specific research questions**]

- How did you go about finding this out, i.e.
  - what approach did you take, and [**Orientation/theoretical framework**]
  - what research methods did you use? [**Methodology**]

- What new information did you find out? [**Findings**]

- What conclusions did you come to? [**Conclusions**]

- What further research in that area would you suggest?[**Recommendations**]

Why traditional structure?

Traditional structure works well because it supplies the answers to the obvious questions anyone would ask about your research.

Cohesion and coherence

Cohesion and coherence are important aspects of writing *anything*:

- Cohesion (links that hold a text together) – do your points link up and flow logically?
- Coherence (relationship between parts of a text) – does your writing make sense to the reader?

There are various techniques for achieving cohesion and coherence in a thesis.

Chapter structure

Good chapter structure assists with both cohesion and coherence.

- The chapter Introduction tell the reader what the chapter is about.

- The chapter Conclusion identifies key points of the chapter and says why they are significant.

Preambles and overviews

Preambles and overviews sum up and make sense of chapter contents.

Diagrams and schematics can be used to communicate (or sum up) chapter contents quickly and to show the conceptual relationships between ideas.

Research questions

The research questions are a valuable structuring device which can be used to explain why you are making certain points at any given time.

Cataphoric and anaphoric reference

- *Cataphoric* – refers the reader "forwards" to something mentioned later on in the text.

- *Anaphoric* - refers the reader "back" to something mentioned earlier in the text.

Not only do good writers refer forwards and backwards to things in the text, they also sum up and repeat ideas (the reader cannot remember what your research questions were three chapters later!)

Thesis overview

Giving an overview of the thesis in Chapter One (Introduction) is a good example of cataphoric reference (i.e. referring to points which occur later in the text).

It helps the reader to conceptualise the thesis content in advance without getting bogged down in detail.

Signposts

Good writers use "signposts" so that readers do not lose their way in an extended text (i.e. 100-200 pages).

Signposts include chapter headings and sub-headings.

"Chunking" text into paragraphs (or bullets) also provides a kind of signposting.

On a smaller scale, signposts include connecting devices such as "Firstly,… Next,… Furthermore,… In conclusion,…

Diagrams and flow charts

Diagrams and flow charts relieve the monotony of the text and give the reader a conceptual grasp of the points made in your argument.

Headings and numbering

Write to *points*, not headings – use rough headings while drafting and refine these once you have your content drafted out.

Decimal numbering should be used to *organise* content, not to generate it.

If you do *not* use decimal numbering, it is extremely difficult to check whether your points follow logically; moreover decimal numbering performs a signposting function.

Table of contents

The Table of Contents (TOC) is a very useful tool for structuring/restructuring and adding more content (or removing it) *after* most of the thesis content has been drafted.

Once the chapter content has been drafted, you can also use a chapter TOC to refine the chapter structure.