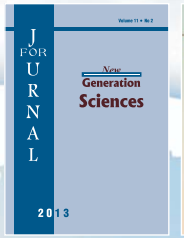
Journals of the Graduate School



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RESEARCH AND DEVELOPMENT

WORKBOOK SERIES 2014

Thinking Beyond ...the box

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THE RESEARCH PROCESS

28 February 2014

Central University of Technology, Free State

RESEARCH AND INNOVATION

10 YEARS AS A UNIVERSITY OF TECHNOLOGY

WORKBOOK SERIES 2014

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THE RESEARCH PROCESS
28 February 2014

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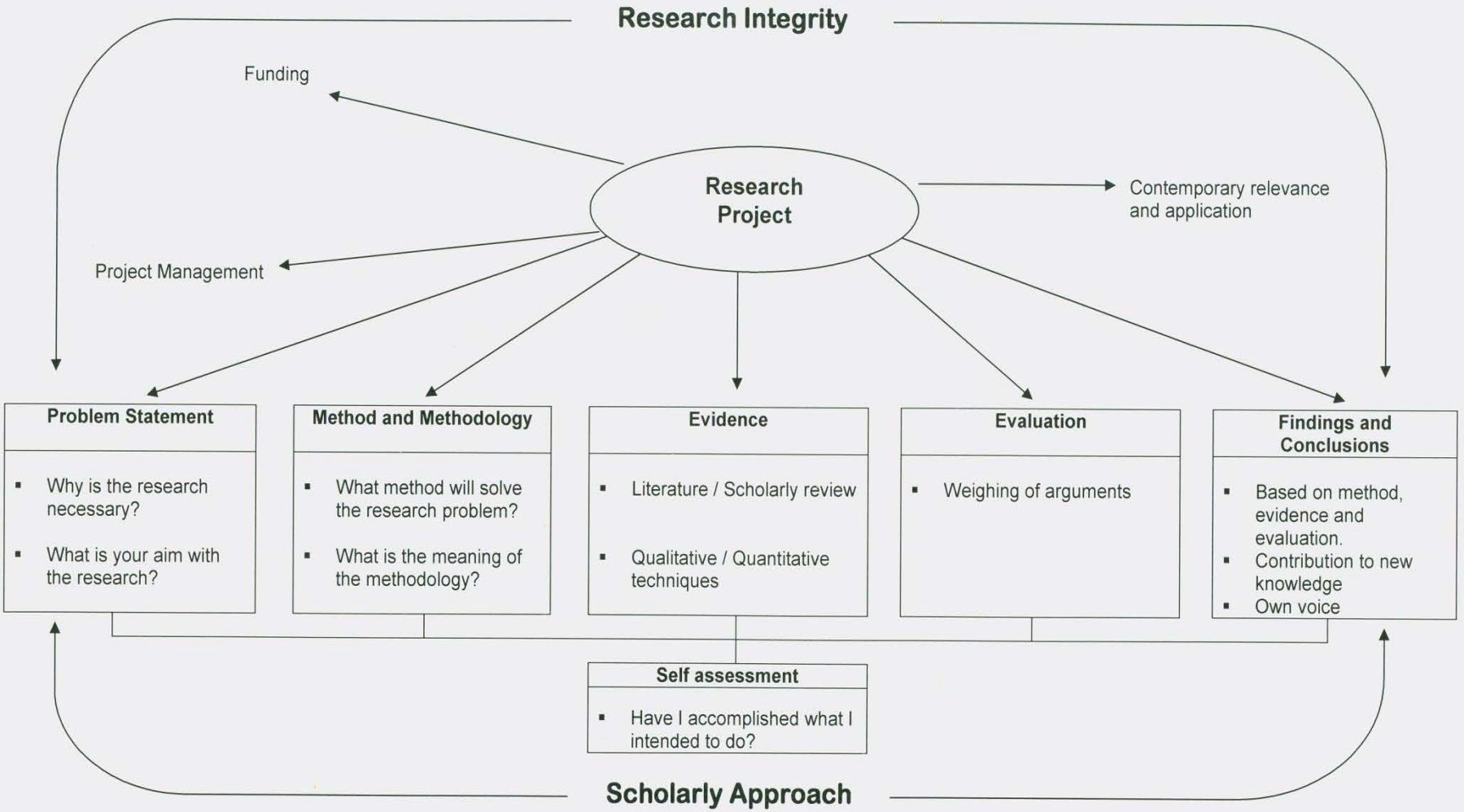
Research & Development Support 2014

The Postgraduate Experience

Prof. Laetus OK Lategan

Dean: Research and Innovation

THE RESEARCH PROCESS



Drafted: Laetus OK Lategan
Dean: Research and Innovation
2010.12

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The research value chain

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Research Problem

- Method & Methodology
- Research Design
- How to do research
- "Writing up"
- Conclusions

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PDAECI Framework

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Plan

- Problem
- Design

Action

- Activity
- Evidence

Results

- Conclusion
- Innovation

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Exercise

- What is your understanding of research?
- What is the research problem that you are researching?
- What is the method you are using?
- Write down any two (envisaged) conclusions of your research project

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Find a Path from Procrastination to Productivity

Avoid the following:

- periods of procrastination,
- pleasant distractions e.g. social networking,
- perfectionism,
- avoidance of regular academic writing,
- lack of sleep, and
- negative self-talk, or the *"imposter phenomenon"*- characterised by the individual assuming they cannot live up to others' perceptions of them

Brian Johnston-Inspiration Hub, 2013:online

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Support Network

Surround yourself with a network of supporters in both your professional and private capacity

- Become well acquainted with the supervisory arrangement in your faculty
- Formalise the supervisory agreement
- Find a network of people in your personal life in support of your success - family, friends, and community

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Determine your direction

- Identify your reason for pursuing a postgraduate qualification
- Match aspired qualification with career opportunities
- Analyse developmental needs of the country, discipline-field, and prospective industry
- These may also reflect in the priorities of funding agencies
- Examples:

✓ Strategy for Human Capital Development for Research, Innovations and Scholarship(HESA);
✓ National Development Plan, and
✓ Millennium goals

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Apply for external funding: Keep Knocking

- Knowledge is power
- Information about funding agencies and ‘call schedules’ will empower
- Knock on every door
- Learn **how and when and where** to “knock”, and keep knocking…

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Three challenges for Postgraduate Students

- Financial support
- Career Guidance
- Mentorship

Proactive Approach: Know the pitfalls

Know the protocols

SAYAS report of 6 November 2013: The Post Graduate Experience

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The information you need at CUT

2014 Manual for Research & Development Support

- Not a substitute for the CUT Yearbook, or
- CUT Assessment Manual
- consult carefully with these documents regarding administrative requirements
- Available from CUT Intranet to all registered students

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2014 Manual for Research & Development Support

Including:

- Support structures
- R&D Programmes and available funding
- What support is available- role of Faculty Research Managers
- How to publish-INTERIM and JNGS: common errors & tips
- The code of ethical conduct at CUT; Research Integrity
- All the polices and lists related to research activities
- Other Support: Library, subsidy for books, study space, journals, colloquiums, workshops

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2014 Manual for Research & Development Support

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Also including

- Guidelines for grant applications
- CUT Strategic Research Clusters
- Success factors in Postgraduate Studies
- Drafting the protocol
- Supervisory relationships - golden rules, common errors
- Habits of successful scholars
- What can a reviewer tell from a list of references?
- Scientific Writing

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To Summarise

- Be proactive to the common pitfalls
- Position yourself to prosper:
  - ✓ structured environment,
  - ✓ support network and
  - ✓ professional supervisory arrangement via faculty
- Be familiar with important institutional documents - Yearbook, Assessment Manual, R& D Support Manual
- Knock on every door and keep knocking

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Sharpen your pencil…

Prof LOK Lategan

Thank you

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HOW TO WRITE A RESEARCH PROPOSAL

Dr M Mostafa
Research Manager: Faculty of Engineering and Information Technology

Central University of Technology, Free State

What is a research proposal?

- A research proposal is your plan
  - It describes in detail your study
  - Decisions about your study are based on the quality of the proposal
    - Research funding
    - Approvals to proceed by the University

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Avoid Plagiarism

- Plagiarism is presenting someone else's ideas or words as though they were your own.

DANGEROUS!!!!

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Research Proposal Elements

- Title
- Background / significance
- Research problem
- Research Question/Aim/Purpose/Objectives
- Methodology
  - Design - Samples / Sample Size
  - Setting - Analysis plan
- Timeline
- References

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Before the proposal

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Research problem

- Why define the Research Problem?
- Defining your destination before beginning a journey.
- It determines,
  - what you will do, -will it withstand scientific scrutiny,
  - how you will do it, and - what you may achieve!

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How is a research problem selected?

- Researchers interest in a topic
- National or agency priorities
- Urgency of an issue
- Availability of research funds
- Availability of supervision

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Steps in defining research problems

1. Identify a broad topic
2. Identify a narrow topic within the broad topic
3. Raise questions
4. Formulate objectives
    - Use action-oriented words - To demonstrate; To evaluate; To measure…

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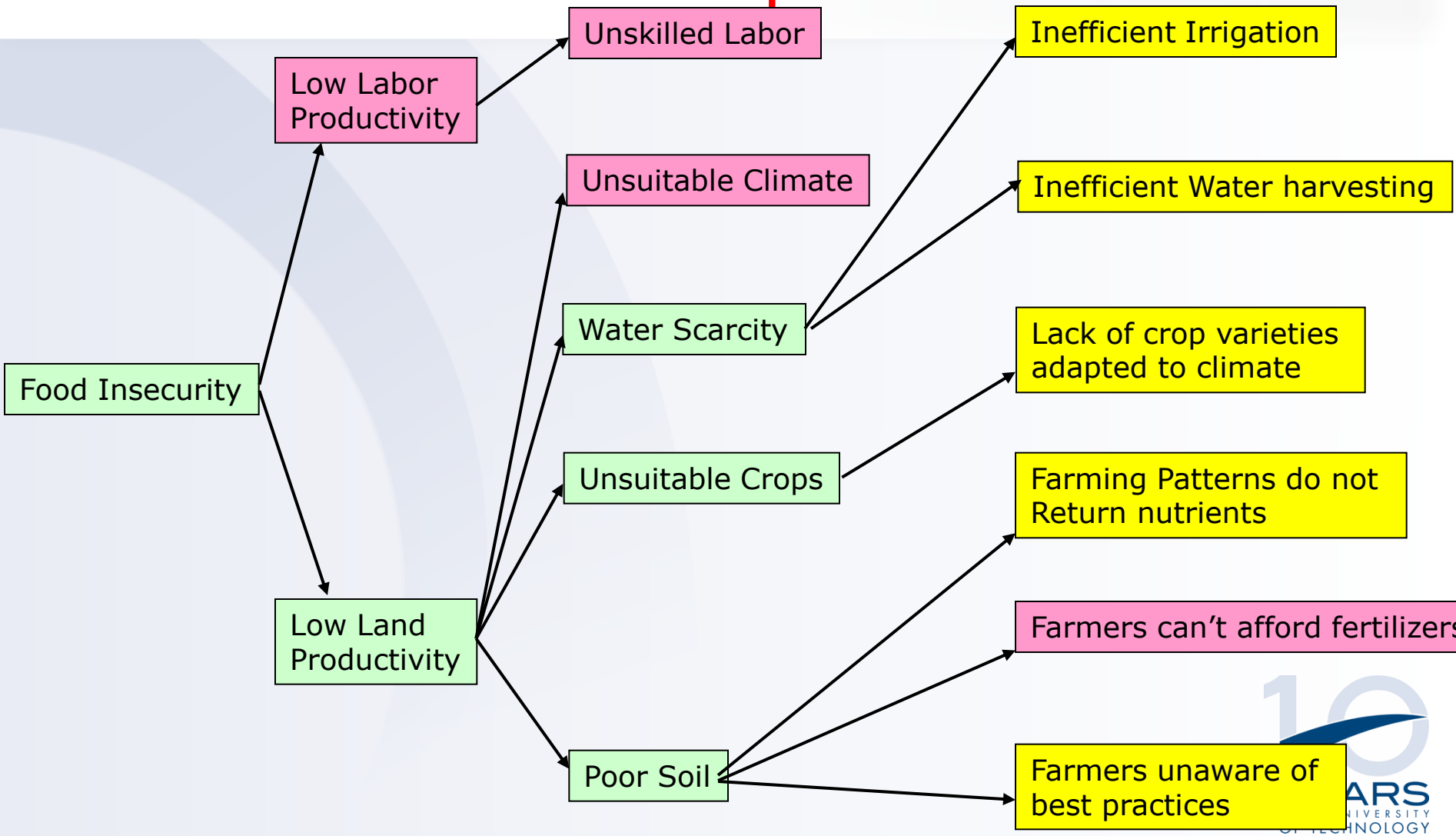
From Broad Topic to Narrow Topic



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Title

- Specific & Short
- This forms the first impression about your research
  - If vague – Reader will be cynical

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Background/ Significance

- Why is your study important?
- Describe the significance of the research question or problem
- Answer the “so what?” question

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Problem Statement

- It is now ready
- Must be crystal clear

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Literature review

- What is the state of the science/art on this problem?
- Are there gaps in the literature?
- How will your study fill those gaps?
  - Synthesize recent literature (within the past 5 years)

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Purpose

- Identify simply what you plan to do in your study
- The purpose can be framed as a research question or an aim
- Examples:
  - What is the effect of using recycled materials on x property?
  - The purpose of this study is to show the effect of using recycled materials on x property.

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Methodology

- This section of your proposal has multiple parts
  - Design
  - Setting
  - Analysis Plan
  - Sample/Sample size
  - Protocol
- Detailed enough so that the reviewers could conduct the study

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Design

- Describe your study design
- Design examples
  - Prospective vs. Retrospective - Descriptive
  - Observation - Experimental work
  - Surveys, interviews, questionnaires - Focus groups, field studies
  - Others

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Samples/Sample Size

- Who are the study participants? Which samples will be used
  - Describe inclusion criteria

  Example: waste from demolition
  - Who / what is excluded?

  Example: waste more than 4 months old

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- How will participants be recruited? How samples will be collected?
  - Convenience sample - Flyers in research offices
  - Advertisements - Electronic Records search
- How many participants/samples are needed?
  - How will you justify the sample size?
  - Do you have a comparison or control group/material?

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Setting

- Describe the sites where you plan to conduct the study
- Do you have support from the administration of the site to conduct the study?
  - Letters of support from site

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Protocol

- What are you going to do to study participants / samples?
  - Detailed, step by step explanation
  - Include how you will identify samples and collect data
  - If there is an intervention, describe it in detail
  - Will you use measurement tools? Describe the tools, including reliability and validity and include a copy of the tools with your proposal
  - List your experimental tests and the standards you are going to use.
  - Include the time frame for implementing the study

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Data Analysis

- Describe your analysis plan
  - What statistical tests will you use?
  - Be sure your statistics are appropriate for your study design
  - Other analysis tools may include modeling validation and / or data interpretation.

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Timeline

- Describe how long it will take to do your study
- Provide timeline benchmarks
- Example:
  - Months 1 – 3 Prepare study tools
  - Months 4- 6 Collect samples
  - Months 7-12 Testing

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- Check the time allowed for your study
- Master
- Doctorate
- Part time
- Full time

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References

- List all references
- In accordance with a pre-defined style e.g. Harvard style. Consult your supervisor.

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Common pitfalls to avoid

- Missing aims or purpose
- Not enough detail about protocol
  - Write your proposal so anyone reading it can understand your plan
- Is your study significant?
  - Does it answer the larger “So what” question? Why should researchers care about this work?

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Common pitfalls to avoid

- Underpowered sample size
  - Describe why you are using the sample size and justify it
- Invalid or unreliable instrumentation
  - Has your instrument been tested with the population you are studying? If not, will you test it within your study?
- Improper analysis
  - Are you using the appropriate analysis?

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Evaluation of proposals

Factors to Consider

1
PRACTICAL CONSIDERATIONS

2
HUMAN CONSIDERATIONS

3
COMPREHENSION

4
QUALITY

5
COMPETITIVE EDGE

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Thank you

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The Benefits of using Mixed Methods Approach in Educational Research

Dr M. K. Mhlolo

Faculty of Humanities

Introduction

- The term ‘mixed’ conjures or invokes the notion of blending, an amalgam or assortment of two or more things being put together
- The need to blend comes from an observation that generally people put things into divisions/classes or ‘false’ dichotomies.
- For example to say “you either win or lose” is a dichotomy. It divides everything into two piles. We have many such dichotomies in life and research is not an exception.
- But almost nothing we dichotomize is truly divided into two piles. They are merely **perceived dichotomies** – divisions we project onto the world because of our perceptions and biases.

Common dichotomies in research methodology

- **Qualitative**
- Subjective
- Inductive
- Hermeneutic
- Micro
- Descriptive

- **Quantitative**
- Objective
- Deductive
- Positivism
- Macro
- Predictive

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Mixed method Research defined

- Briefly, mixed research emerged in reaction to the parading wars which were characterised by the polarization between quantitative and qualitative research with researchers pointing out that it was highly questionable whether such a distinction between quantitative and qualitative was any longer meaningful for helping researchers understand the purpose and means of human inquiry
- Admittedly there might not be a perfect or essentialist definition that has emerged but generally -Mixed methods research might be defined as the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and corroboration (Johnson et al., 2007)
- Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach standing alone.

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Fundamental Rationale for Mixed Method Research

- The fundamental rationale behind mixed methods research is that we can learn more about our research topic if we combine the strengths of qualitative research with the strengths of quantitative research while at the same time compensating for the weaknesses of each method.
- This has been called the fundamental principle of mixed methods research (Johnson & Onwuegbuzi, 2004:18).
- Combine the methods in a way that achieves complementary strengths and non-overlapping weaknesses.

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The strengths of each method

Quantitative methods

- Use large and perhaps representative samples
- Likely to enhance both reliability and validity
- Tracing trends and relationships

Qualitative methods

- Sensitivity to meaning and context
- Local groundedness
- In-depth study of smaller samples
- Greater methodological flexibility
- Enhances the ability to study processes and change

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The complex nature of Educational problems

- Basically we are social sciences researchers and in this context Cook (1985) coined the term *critical multiplism* pointing to the need for multiple sources of evidence when judging social programs - The complexity of our educational research problems calls for answers beyond simple numbers in a quantitative sense or words in a qualitative sense. A combination of both forms of data can provide the most complete analysis of such problems.
- Mixed methods research is practical in the sense that individuals tend to solve problems using both numbers and words, they combine both inductive and deductive thinking, and they employ skills in observing people as well as recording behaviour. It is natural then, for individuals to employ mixed methods research as the preferred mode of understanding the world.
- When people talk about the crisis of poor performance of learners in Mathematics for example, both numbers (quantitative) and words (qualitative) come to mind. The average pass rate for District X was 45,8% in 2011. This is mainly due to the schools that can be described as generally dysfunctional and the province is not properly managed. This type of talk is not only more natural, it is also more persuasive than either words or numbers by themselves in presenting a complete picture of the crisis.

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The complex nature of educational problems cont....

- This way, educational researchers can situate numbers in the contexts and words of participants, and they can frame the words of participants with numbers, trends, and statistical results. Both forms of data are necessary today.
- Audiences such as policy makers, practitioners, and others in social sciences need multiple forms of evidence to document and inform research problems. A call for increased sophistication of evidence leads to a collection of both quantitative and qualitative data.
- Quantitative research is weak in understanding the context or setting in which people talk. Also the voices of the participants are not directly heard in quantitative research. Further quantitative researchers are in the background, and their own personal biases and interpretations are seldom discussed. Qualitative research makes up for these weaknesses. Hence mixed methods research provides strengths that offset the weaknesses of both quantitative and qualitative research.

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Quantitative vs. Qualitative – a false dichotomy

- There is no rivalry between quantitative and qualitative methods instead they complement each other
- Quantitative data and findings have underlying qualitative dimension
- Quite often availability of data and its characteristics determine the method and what is possible

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The research process

- A number of researchers have outlined how mixed method approaches can be effective at the research design, data collection and data analysis stages of the research process
- At the research design stage quantitative data can assist the qualitative component by identifying representative sample members as well as outlying (deviant) cases i.e. (participant enrichment)
- Conversely at the design stage, qualitative data can assist the quantitative component of the study by helping with conceptual and instrument development – (instrument fidelity)
- At the data collections stage, quantitative data can play a role in providing base - line information and helping to avoid the “elite bias” (talking to high-status individuals). On the other hand, at the data collection stage, qualitative data can help in facilitating the data collection process – as the researcher can ‘tap different domains of knowing’ e.g. interviewees often raise quite different issues to those provided in a structured questionnaire.

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The research process cont.

- During the data analysis stage, quantitative data can facilitate the assessment of generalizability of the qualitative data and shed new light on qualitative findings.
- During the data analysis stage, either qualitative or quantitative data can serve verification purposes- combinations are also useful to provide richer data
- Alternatively, during data analysis stage, qualitative data can play an important role by interpreting, clarifying, describing, and validating quantitative results, as well as through grounding and modifying.

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Validating results

- Some researchers have introduced the idea of triangulation between or across methods - In this context it has been argued that the convergence of findings stemming from two or more methods enhances our beliefs that the results are valid and not a methodological artefact
- Once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced and confidence is built in the audience – hence the most persuasive evidence comes through triangulation of measurement processes
- Boring (1953) foreshadowed this idea as follows: As long as a new construct has only the single definition that it received at birth, it is just a construct. When it gets two alternative operational definitions, it is beginning to be validated. When the defining operations, because of proven correlations, are many, then it becomes reified.

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Validating results

- By utilising between-method triangulation the biases inherent in any particular data source, investigators, and particular methods will be cancelled out – the result will be a convergence upon the truth about some social phenomenon – the researchers can therefore construct superior explanations of the observed social phenomena.
- Triangulation therefore
  - Allows researchers to be more confident of their results
  - Stimulates the development of creative ways of collecting data
  - It can lead to thicker richer data
  - It can lead to the synthesis or integration of theories
  - It can uncover contradictions
  - It may serve as the litmus test for competing theories

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In summary

- Mixed methods provide corroboration in that they help:
  - Validate and explicate findings from another approach and produce more comprehensive, internally consistent and valid findings
  - Provide more elaborated understanding and greater confidence in conclusions
  - Handle threats to validity and enable us to gain a fuller and deeper understanding
  - Provide richer/more meaningful /more useful answers to research questions

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Thank you

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Academic Writing Tips, Dos and Don'ts!

Faculty of Management Sciences

Research Office

Prof. C. Chipunza

Central University of Technology, Free State

Contents

1. Introduction
2. Parts of speech
3. Effective academic writing
   - Sentences
   - Wording
   - Paragraphs
   - Literature Reviewing
   - Referencing

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Introduction

- Writing and reasoning: two most important success skills in higher education!
- Writing: the heart of academic life; it makes a good student!!

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Lets go to basics!

- Writing research proposal or papers is about presenting ‘ academic argument (s)’
- A good academic argument is one presented in a good and clear and logical way with correct tenses/grammar!
- It includes evidence and counter-arguments

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1. Parts of speech- role of words in sentences!

- Verbs
- Noun [common vs proper]
- Pronoun [used in place of a noun (it, he, she, her, etc)]
- Adjective [describing word that gives a noun some quality (excellent presentation, boring lecture)]
- Prepositions [describe the movement of noun in a sentence:(to, from into, for, of)] They precede the noun]

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Tenses

- Use correct tense and be consistent

Examples:

When introducing and discussing other people's opinions:

Chipunza claims that …….

Chipunza believed that [suggesting dated opinions!]

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Tenses

- After a student presents his/her problem clearly, this is an example of what I read:
- *The purpose of this research will be to explore….*
- *This research will explore….*
- The purpose of this study is to explore…
- This research explores…..

Future tense sounds uncertain and unconfident!!

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Tenses [Prepositions]

- What is wrong in this sentence!

- There are so many of us now that we seem to of lost a sense of community and become strangers on our own society

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Tenses [Singular & Plurals]

- Always match verbs and nouns correctly!!

- The managers argue….
- The manager argues….

- The policy of the institution are too unreliable!

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Capital letters

- Apart form people's names and beginning of sentence, use capital letters only if the word is a *proper noun.*
- Examples
- The Department of Human Resources is understaffed
- One of the Faculties at our institution has low research output

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2. Effective writing : active or passive

- Active
- Scientists classify glass as solid.. ‘doer’
- Passive
- Glass is classified is solid.. ‘action’
- Passive voice is more formal in nature

NB: Choose a tense and stick to it…especially in literature review and discussion sections!

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Effective writing: sentences

- Avoid long sentences!
- Home care has been expanding tremendously over the past few years partly due to recent technological advances that enable assessments and treatments to be a part of the home setting which at one time could only be performed within the hospital environment. X

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Effective writing : sentences

- Keep sentences short.
- Home care has expanded tremendously over the past few years. This increase is partly due to recent technological advances that now make more assessments and treatments possible in the home rather than only in the hospital.
- Use straightforward and varied sentence construction

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Effective writing : personal pronouns

- Do not say ‘my research’ or ‘our conclusion’
- Always write in third person
- The present research….
- A conclusion that can be drawn….

NB: [Controversial]!!! Some journals want this style of writing!

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Effective writing : Use of simpler words

- Always substitute *abstract nouns* with verbs
- Examples:
- The author made a revelation (abstract noun) that…
- The author revealed (verb) that……
- Give me more examples!!

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Effective writing : academic paragraph

- Is not:
- A list of points
- One sentence
- A bundle of sentences
- A collection of loose ideas
- A well construction piece of rhetoric that bears no relation to what comes before or after it

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Effective writing : academic paragraph

- A paragraph introduces and develops one main idea
- The main idea is introduced through a topic sentence, which is usually the first sentence
- Topic sentence gives a general idea of the main idea or intention of paragraph
- All sentences in the paragraph need to relate to the main idea in a logical way
- Paragraphs are linked together and flow logically on from each other

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Effective writing : Academic paragraph

- Topic sentence- What the paragraphs is about
- Plan sentence – how the paragraph will be organised
- Supporting sentences – provide detail and development
- Example:
- TS – It is important to study small businesses.
- PS – There are three reason for this.
- SS - Firstly…….

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Effective writing : coherence of sentences and paragraphs

- Use link words – transactional devices!!
- They show how sentences relate to each other

- Research indicates that seeking to be an entrepreneur is often viewed as a viable career option for many (Bird and Jelinek, 1988; Shane and Venkatataman, 2000; Shane et al., 2003; Segal et al., 2005). **Yet**, since McClelland (1961) suggested that a high need for achievement was a common trait of entrepreneurs, a great deal of research turned to investigating the dominant personal characteristics of entrepreneurs. **Consequently**, much of the more recent research in the field of entrepreneurship sought to determine what kind of personal traits (including personality) may distinguish entrepreneurs from non-entrepreneurs, and successful entrepreneurs from unsuccessful
- Entrepreneurs **However,** despite the wealth of knowledge…

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Effective writing : transactional devices

- Can be used to
- Illustrate (for example, for instance)
- Contrast (……)?
- Emphasise/stress (actually, indeed)
- Add (besides, furthermore, in addition, also)
- Compare (similarly, likewise, equally)
- Conclude (finally, in summary, in conclusion)
- List (Firstly, finally)

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Effective writing : Academic paragraph

- **Types**
- Introductory – create expectations
- Expository/Explanatory - clarify main ideas, provide detail and development
- Transitional - link ideas/paragraphs
- Concluding paragraphs – discuss implications/synthesis of ideas/draw conclusions

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Academic writing is supported

- Using sources strengthens your writing / gives credibility to what you are saying
- Shows you've done research and have synthesized the findings into your own words
- Shows your participating in the intellectual conversation within your discipline

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Incorporate what you read by:

- **Quoting** - use the exact words of the author(s). When quoting you usually place the words in quotation marks ("…")
- **Paraphrasing** – putting the information in your own words
- **Summarising** - express the main points when it is someone else's opinion, theory or information.
- When you incorporate the work of others in your writing you must always reference your sources

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Watch Out !!

- Always write out ‘ten’ or under in full. Above ten, use numbers (11, 12, 13)
- Never start a sentence with a number!
- Maintain consistency in writing the purpose or objectives of the study
- When you use the word ‘define’, follow it with a definition in quotation marks, otherwise don’t use the word!!

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Watch Out !!

- Do not use superlatives – ‘enormous value’; ‘great achievement’

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On Literature Review!

- LR is not a discussion of government documents, newspaper articles, magazines stories
- These sources are useful in the introduction of or background of a study!
- Use sources from academic journals mostly
- Books are good for definitions and explanatory notes/clasisfication, etc

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On Literature Review!

- Avoid over-reliance on single source. Use multiple sources to illustrate a point
- Statements made in literature must be supported by references.
- No personal opinions, observations and conclusions are usually made in literature review!
- Look for original sources rather than saying Chipunza (2012) in Dzansi (2014). Find direct reference to Chipunza

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On Literature Review!

- <u>Speculations and assertions</u>
- If you are making a claim that could be disputed by the reader, make sure you use some kind of evidence to back it up.
- Example: 'Without human resources, there could be no productivity in an organisation.'
- With no evidence…this is speculative!!!
- Back it up with research or example (when or where this was the case)

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On Referencing

- No initials or first names in text referencing (Chipunza, C. 2013) XX NO!
- Use of ‘and’ (in text) and ‘&’ (references)!??
- Citing three or more authors for the first time in full, thereafter et al. is used to cite them again
- Never put the full reference or name of article in text…!!

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When a reference isn't required

When you include information that is:

- general knowledge (e.g. that Barrack Obama is the President of the U.S.A.)
- information that is common knowledge in your field
- ideas that are definitely your own, and findings or insights from your own research!!

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On Referencing

- Page numbers are required if you quote verbatim, otherwise = 'plagiarism/intellectual kidnapping'
- CUT uses Harvard Referencing style!!
- Reference list to be ordered alphabetically
- Avoid using/citing web references at all costs…look for the article.

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Quotable quote!

- Epictetus….Greek Philosopher once said”
- ‘Do not write so that you can be understood, write so that you cannot be misunderstood!’

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Conclusion!

- Good academic writing is hard work, it takes time and concentration. Good writers aren't born that way, rather they understand that writing is a process!

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Thank you

The WWW of LIS Research Support:

The Who, What & Where

Library and Information Services

Dora Ackerman
Deputy University Librarian:
Electronic Resources & LIS Systems

Outline

- Technology @ the LIS
- ISI Web of Science@ the LIS
- JCR @ the LIS
- Google Scholar @ the LIS
- EBSCO Discovery Services @ the LIS
- RefWorks @ the LIS

Technology @ the LIS

Technology

- ERAC Facility
- Training Facilities
- WiFi
- 24-hour study halls
- OPAC Terminals
- Study cubicles
- Students with Disabilities
- Hostels
- Cost of Internet Access
- Printing Facilities

ERAC: Electronic Resource Access Centre

ERAC Facility

- Facility provides students:
  - Access to 139 Dell PCs + 88 PCs = 227 PCs
  - Access to CUT Network using Microsoft Network Environment
  - Access to the LIS Electronic Resources

Training Facilities

Training Facilities

- Two facilities
  - 40 PCs
  - 20 PCs + 1 Trainer PC

WiFi (Wireless networks)

WiFi

- A further interesting development took place in 2005 with the establishment of a radio network (WiFi Hotspots)
- LIS was one of the first libraries of its kind in the country where users can log in using their laptops.
- Various Hotspots in the LIS & Campus

24-hour study halls

24-hour study halls

- WiFi spot
- 20 network points
  - Used by students with laptops that can not access the wireless connection
- All of this is available 24 hours per day, 7 days a week

OPAC Terminals

OPAC Terminals

- 13 OPAC terminals
- Also accessible to students in wheelchairs

Study cubicles

Study cubicles

- 16 private study cubicles
  - Equipped with CUT network points
  - Managed by the LIS

Students with Disabilities

- The following are available:
  - The LIS building is accessible by students and staff members with disabilities
  - One OPAC terminal is at a lower level so that students making use of wheelchairs can also access one of these terminals
  - The lifts are equipped with Braille buttons
  - The Computer Laboratory and both training laboratories are accessible for students making use of wheelchairs

Hostels

- All the hostels are equipped with Internet Connections in the rooms
  - Students with PCs can access the LIS's databases and informational websites from their rooms
  - Students do not pay for internet access if they search on the LIS resources

Cost of Internet Access

- All students pay for internet access since January 2007
- The rates apply to internet usage at the LIS computer facilities and residences in the following categories:

During the day	07:00 to 18:00	30c per Mb
During the evening	18:00 to 21:00	15c per Mb
At night	21:00 to 07:00	Free of charge

Cost of Internet Access

- Use of the internet is FREE for the following purposes:
  - CUT's official websites
  - e-Thuto (WebCT)
  - Academic computer laboratories for official class purposes
  - LIS's training laboratories during official training sessions

Hot tip

- **Remember to use the CUT e-mails: studentnr@stud.cut.ac.za**

Printing Facilities

- Due to the privatisation process of the CUT's photocopying facilities, the ERAC is no longer responsible for providing printing facilities via digital copiers
- This responsibility has been moved to Xerox Bytes Solutions, who is providing the service at Level 0 of the LIS

ISI Web of Science @ the LIS

Where to find?

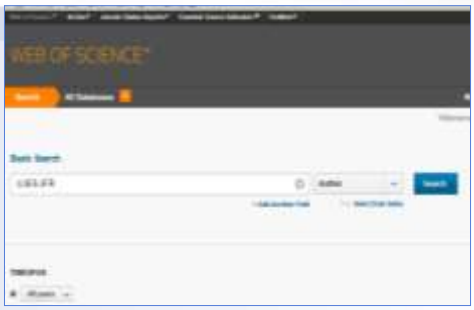
Click on Databases

Choose ISI Web of Science

Search for Author

Use Author Index

Click on Search

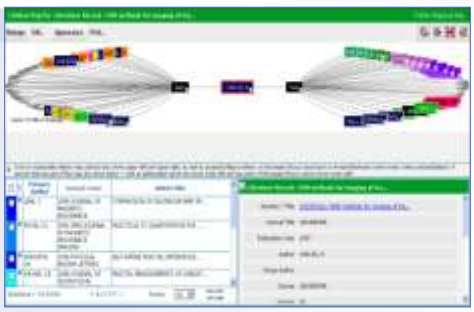


Click on article

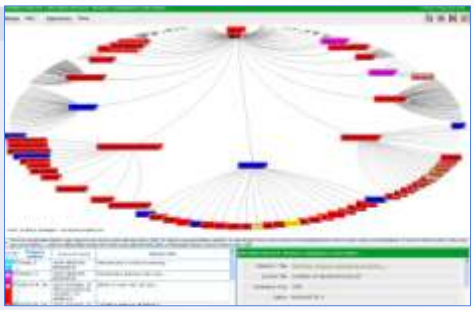
Click on Citation Map

Choose citation map details

Forward & Backward Report



2nd Generation map



JCR @ the LIS

Journal of Citation Report for Impact factors

Search for Journal title

Journal Impact Factor

Google Scholar @ the LIS

Search for author

Find all the articles of author

Details of article

EBSCO Discovery Services @ the LIS

Databases

- Full-text databases:
  - EbscoHost
  - ProQuest
  - SA e-Publications
  - ScienceDirect

→ **EDS**

Choose EDS

Search for Author

List of Articles

Link to Articles

The Article

Find Journal

Choose the applicable resource

RefWorks @ the LIS

Refworks

- If from off-campus computer, type "RWCUTSouthAfrica" as Group Code
- Click on "Go to login"

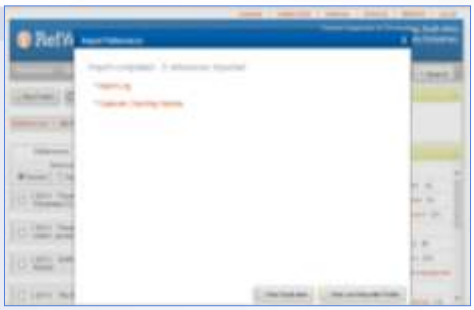
Login or create your own account

Folders to organize citations

Export from ProQuest

Export/Save records

Import completed



Create Bibliography

Preview of Bibliography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Thank you
Contact details
Dora Ackerman
Deputy University Librarian:
Electronic Resources & LIS Systems
Tel.: +27-51-507-3472
E-mail: dora@cut.ac.za
www.cut.ac.za | Bloemfontein (051) 507 3911 | Welkom (057) 910 3500

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The sage on the stage?

Facilitating a conference session

Department of Clinical Sciences

Hesta Friedrich-Nel
HOD Clinical Sciences

Central University of Technology, Free State

Agenda

- Why conferences
- Sessions and chairpersons
- Primary duties
- Before the session
- During the session
- Question time
- After the session

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Why a conference

Create opportunities

- interact & network (*schmooge*)
- select role models, supervisors and research collaborators
- converse, and
- learn from each other

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Sessions

- Sessions style vary:
  - Lecture style with limited opportunity to interact
  - Round table / breakfast sessions that are totally interactive
  - Find more information at http://onglobalization.com/the-conference/types-of-conference-sessions

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Chairpersons

The sage

The guide

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Primary duties

- Set the stage for friendly atmosphere and open and relaxed discussion
- Introduce the speakers
- Adhere to timelines
- Facilitate dialogue
- Summarise

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General

- Find out about the dress code
- Read the abstracts
- Attend a session in the same venue
- Learn from other session chairs

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Before the session

Preparation

- Prepare questions
- Upload presentations
- Presenters
- Needs of presenters
- Explain about time-keeping

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During the session

- Introduce the session
- Introduce yourself
- Explain procedure to the audience
- Introduce the speakers
- Assist with a/v
- Keep the time
- End the session (applause)

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Question time

- Invite questions
- Rephrase or repeat questions
- Always prepare a question to start the discussion
- Promote exchange of ideas
- Allow equal opportunities
- End session at the scheduled time with summary

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After the session

- Thank the audience
- Invite and encourage further discussion during the conference
- Evaluation forms to complete
- Close the session (main points)
- … take a deep breath &

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reflect …

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The sage on the stage …

or the guide on the side ……

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Thank you

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References

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- How to chair a conference session. The University of Kansas College of Liberal Arts and Sciences. Available from http://www2.ku.edu/~kuarthis/docs/course_flyers/Guidelines%20for%20Session%20Chairs.pdf
- Conference session chair guidelines available from http://cms.comsoc.org/eprise/main/SiteGen/Globecom_2010/Content/Home/SESSION_CHAIR_GUIDELINES.html

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Tricks of the trade: Picking up the pace of today's scientific research

Faculty of Health and Environmental Sciences

Dr. Khajamohiddin Syed
Postdoctoral Fellow

Central University of Technology, Free State

A bit about myself

- **Born in Kurnool, INDIA**
- **Known as “Syed / Khaja”**

PhD (INDIA)

Postdoc (RSA)

Visiting Faculty (USA)

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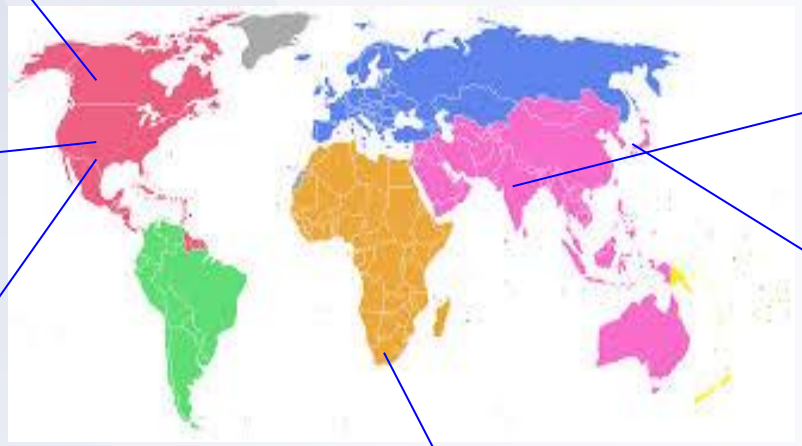
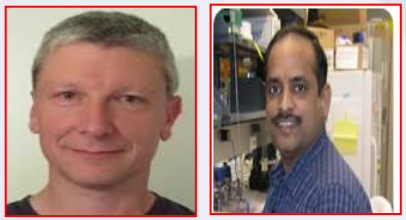
A bit more about myself

"Science"

JGI of DOE, USA

Published articles and applied major grants





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Sections

- Research
- Scientific Research
  - ✓ Literature
  - ✓ Notes
  - ✓ Experiment planning
  - ✓ Results
  - ✓ Discussion
- Publication
- Future plan
- Key factors for success
- Acknowledgements

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Scientific Research

- Knowing the secret behind the process
- How do we do that?
- How we convey our message?
- How do we get recognition?
- Stepping stone – door way to Scientific Research

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Scientific Research: literature collection

- Know your Topic
  - Google
  - Pubmed
  - Scopus
  - Ebsco
  - Science direct
  - Register – Specific Journals

ELSEVIER

Springer
the language of science

nature publishing group npg

Science
AAAS

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Scientific Research: Making notes

- Hard copy
  - Highlighting
- Soft copy
  - Word file – cut & paste
  - Don't forget Reference
  - Type full references
- Internet links
  - Web page links
  - You tube video links
- Researchers information

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Scientific Research: Experiment planning

- Resources
  - Funding
  - Expertise
  - Easy way or Hard way
- Student availability
  - Time
  - Interest
- Successful planning
  - Simple experiments
  - Open for new Ideas
  - Flexible

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Scientific Research: Results

- Record the results
  - Hard copy (possible)
  - Soft copy
  - Raw data
  - Processed data
- Prepare Tables
  - Consult literature
- Prepare Figures
  - Consult literature

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Scientific Research: Discussion

- Literature
- Second opinion
- Promoter

Half-empty

↓

Half-full

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Scientific Research: Publication

Writing the manuscript

↓

Second opinion & Language editing

↓

Approval from all co-authors

↓

Communicate to the journal

↓

Accept/revise/reject

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Scientific Research: Publication

Suitable for no impact factor journal

↓

Communicate to Low impact factor journal

↓

Rejected/ Major revision(Referee comments)

↓

Through revision

↓

Communicate to high impact factor international journal

↓

Accepted (minor revision)

Low impact factor

↓

High impact factor

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Future plan

JOB

company

- Look website/friends
- Approach
- Prepare your CV
- Apply
- Connections

Research

(Master/PhD)

- Search future research areas
- Look for technical skills
- Look for researchers
- Check manuscripts
- Approach with interest & CV
- Explore foreign PhD

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Key for success

Honest

Sincere

Up-to-date

Hard work

Perseverance

I to We

Yes or No

Ego – no place

Shy – no place

Truth

Appreciation

Smart Connections

Patience, Time management & Long-term planning

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HOD

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Dean

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Dean, R&I

Prof. Shale
TUT

Prof. Lues
RM

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- **Zenobia**
- **Colleagues & Staff of FHE**

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Acknowledgement

My colleagues

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Thank you

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