

**THE POSTGRADUATE TOOLKIT  
ON CD: A POSTGRADUATE  
CAPACITATION INITIATIVE**

**2<sup>ND</sup> NATIONAL POSTGRAD DEVELOPMENT  
IMBIZO**

**DR LAYLA CASSIM**

**B.PHARM. (CUM LAUDE), PHD (PHARMACOLOGY)  
(RHODES), MBA (CUM LAUDE) (UNISA)**

**FOUNDER: LAYLA CASSIM ERS CONSULTANTS CC**

**13 MAY 2013**

# INTRODUCTION

ASSAf report (2010):

- In 2007 SA produced 1274 PhD graduates or 26 per million of population
  - (Decreased to 1182 in 2008)
  - Compared to:
    - Australia: 264 per million
    - Portugal: 569 per million
    - (Brazil: 42 per million)
- Thus a critical need to increase the number of postgraduate students;

# INTRODUCTION

- Ramani and Malema (Mail & Guardian, 12-19 April 2012, p. 41) cite a CHE (2007) report:
  - More female than male postgraduate students, but only 42% of PhD graduates are women;
  - Women publish between 14-37% of papers;
  - Only a third of NRF-rated researchers are women;
  - 43% of permanent academic staff at universities are women, but only 24% are at the Professor/ Associate Professor level;
  - Only 40% of Senior Lecturers are women

# INTRODUCTION

- Recent National Development Plan (2011):
  - “Increase the numbers of African and woman postgraduates, especially PhDs, to improve research and innovation capacity. This will help to accelerate the transformation of South Africa’s scientific and academic communities to better reflect the population”
  - “Produce more than 100 doctoral graduates per million per year by 2030”
  - “Increase the percentage of PhD qualified staff within the higher education sector from the current 34 percent level to over 75 percent over 20 years”

# INTRODUCTION

- National Research Foundation's mission statement (Vision 2015 document):
  - “To contribute to the knowledge economy in South Africa by attaining at least 1% of global research and development (R&D) output by 2015”
    - Changed to 0.5%

# INTRODUCTION

- Long-term target is to increase the number of PhD graduates from 1200 in 2005 to 6000 by 2025 (SA PhD Project)
- **BUT:** “ ‘The number of students enrolling for research Master’s degrees has declined steadily since 2004, as did the number of graduates since 2005’. As the pool of potential doctoral candidates decreases, it will take a special effort to produce 6000 graduates per year.” (CHE, 2009 cited in SA PhD Project Partnership Guide)

# INTRODUCTION

- So there's a strategic imperative to increase the number of postgraduate students (feeder to doctoral graduates) to increase SA's research output and competitiveness
- What are some of the stumbling blocks that result in postgraduate students dropping out/ taking longer than planned to complete their degrees?

# INTRODUCTION

## **ASSAf report (2010):**

- 4 main blockages to increased PhD output:
  - Pipeline constraints (quality of schooling system, undergrad and postgrad pipeline)
  - Institutional constraints – limited supervisory capacity at universities
  - Financial constraints
  - Administrative constraints



# INTRODUCTION

- Criticisms levelled against universities (HEQC Audit Panel Reports cited in ASSAf report, 2010):
  - Inadequate support for postgrad students
  - Lack of clarity on guidelines to students
  - Lack of formal training for supervisors
  - Inconsistent application of rules regarding supervision and examination across faculties within the same university
  - Inadequate monitoring and information systems to track postgraduate students

# INTRODUCTION

- ASSAf report (2010) also identifies 4 main supervision-related reasons for “pile-up” effect:
  - Availability of supervisors to students (time, access/ communication), e.g. supervisor is overburdened with lecturing load/ other students, supervisor takes long to provide student with feedback
  - Lack of attention/ interest by supervisors in the development of postgrad students (can lead to demotivation; may be due to insensitivity to cultural differences)
  - Possible lack of competence of supervisors in students’ specific research areas, computer literacy
  - Students only having access to one supervisor

# INTRODUCTION

- Finally, ASSAf report (2010) identifies poor student-supervisor relationships as a risk factor for doctoral attrition

# INTRODUCTION

- The Postgraduate Toolkit is a capacitation and skills development resource to enhance the postgrad experience
- A humble initiative and contribution towards:
  - Increasing research output
  - Achieving Employment Equity
  - Accelerating transformation
  - Enhancing academic development
  - Enabling career mobility of young academics and researchers, especially those from designated groups
  - Providing a support system to postgrads

# AN OVERVIEW OF THE CHAPTERS

- Chapter 1: How to write a research proposal
- Chapter 2: How to write a grant application or funding proposal
- Chapter 3: An overview of research design and methodology
- Chapter 4: Guidelines on how to write a thesis and research report
- Chapter 5: How to write and publish an academic paper
- Chapter 6: Tips for oral and poster presentations on your research
- Chapter 7: Key project management principles in research
- Chapter 8: Some self-empowerment tools and support systems for postgraduate success
- Chapter 9: The student, supervisor and university – enhancing postgraduate supervision
- Chapter 10: Your personal and professional development contract (PDC)

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 1:

### How to write a research proposal

- The importance of a research proposal;
- The structure of a research proposal, with each of the components explained in further detail;
- Examples of research proposals from a variety of disciplines and from Honour's level through to PhD

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 2:

### How to write a grant application or funding proposal

- How to find potential funders;
- The structure of a grant application, with each of the key components explained in further detail;
- A basic project management plan that will guide the implementation of the proposed research and which can be included in the grant/ funding application

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 3:

### **An overview of research design and methodology**

- An introduction to some of the key concepts of research design and methodology;
- Some ethical considerations in research;
- Understanding quantitative research methods, in particular the steps involved in designing and using a questionnaire;



# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 3 cont.

### **An overview of research design and methodology**

- Understanding qualitative research methods, in particular the steps involved in designing interview questions and conducting interviews;
- A basic introduction to the use of descriptive and inferential statistics in analysing quantitative data;
- The use of content analysis in analysing qualitative data

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 4:

### Guidelines on how to write a thesis and research report

- Some important guidelines, such as when to start writing, the length of a thesis/ research report, how to edit the document and some tips on addressing “writer’s block”;
- The structure of a thesis, with each of the key components explained in further detail;
- How to conduct and write a literature review;
- The submission process and what happens thereafter

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 5:

### How to write and publish an academic paper

- The importance of publishing;
- Finding a suitable journal;
- The components of an academic paper, with each of the key components explained in further detail;
- The submission process and what happens thereafter;
- Some ethical considerations

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 6:

### Tips for oral and poster presentations on your research

- The structure of an oral and poster presentation;
- Some general presentation tips, for example regarding preparation and delivery;
- An example of an oral presentation

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 7:

### Key project management principles in research

- The importance of effective interpersonal and communication skills;
- The significance of defining the scope of the research project;
- The role of effective planning;
- Guidelines in controlling, monitoring and evaluating a research project, so that the project is completed within the allocated time and budget, and according to the required quality standards;

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 7 cont.

### Key project management principles in research

- Finalising the research project and what happens thereafter;
- A basic project management plan to guide the planning, implementation, monitoring, evaluation and strategic review of the research project

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 8:

### **Some self-empowerment tools and support systems for postgraduate success**

- Some common challenges encountered in postgraduate study;
- Assessing your quality of life;
- Tips to address certain challenges, for example time-management tips;
- Enhancing interpersonal communication through the use of the “Johari window”;

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 8 cont.

### **Some self-empowerment tools and support systems for postgraduate success**

- Understanding motivation by briefly considering the theories of Maslow and Herzberg;
- Some suggestions on what workplaces can do to enhance their support to employees who are studying



# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 9:

### **The student, supervisor and university – enhancing postgraduate supervision**

- The role of the supervisor as a mentor;
- Assessing dominant mentoring and learning styles;
- Using the concept of the “emotional bank account”, as well as an understanding of different frames of reference and personal values, to enhance interpersonal relations;
- The key roles and responsibilities of supervisors and postgraduate students;

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 9 cont.

### The student, supervisor and university – enhancing postgraduate supervision

- Managing potential conflict between supervisor and student;
- An example of a mentoring pledge and progress report;
- A condensed outline of a proposed integrated performance management system in academia to enhance the quality of postgraduate supervision

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

## Chapter 10:

### Your personal and professional development contract (PDC)

- The importance of the PDC in guiding all aspects of the user's structured learning and development;
- A template of our customised PDC, which users can adapt to suit their own needs and which covers goals, key activities, time frames, required resources, possible risks and contingencies;

# SUMMARY OF KEY FOCUS AREAS IN EACH CHAPTER OF THE TOOLKIT

Chapter 10 cont.

## Your personal and professional development contract (PDC)

- How the PDC can be used by students and supervisors to guide the student's learning, development and progress with his/ her postgraduate study

# BENEFITS TO A DIVERSE RANGE OF STAKEHOLDERS

- Postgraduate students;
- Supervisors, in enhancing their mentoring role;
- Workplaces, line managers and Human Resources Practitioners, in supporting employees who are studying;
- Universities;
- Funding bodies;
- Science Councils/ other Research Bodies;
- Government at all three tiers

# JOURNEYING THROUGH THE TOOLKIT

A Practical “feel” of the Toolkit

# THANK YOU VERY MUCH FOR YOUR TIME!

Dr Layla Cassim

Author, editor and publisher: Postgraduate Toolkit

[www.laylacassim.co.za](http://www.laylacassim.co.za)

Email: [lcassimers@gmail.com](mailto:lcassimers@gmail.com)

Mobile: 074 999 5847