



## **The LINK Centre**

**Graduate School of Public and  
Development Management,  
University of the Witwatersrand**

**Master of Management  
in the field of  
ICT Policy and Regulation**

**2010**

# Quick Reference

# Quick Reference

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# Introduction and Overview

Welcome to the degree of Master of Management in the field of Information and Communications Technology Policy and Regulation.

This programme guide contains all the essential information about your degree programme, and should be read in conjunction with the P&DM Study Guide. Please read it through carefully and use it as a guide throughout your degree.

All applied research, projects and teaching and learning programmes of this degree fall under the School of Public and Development Management at the University of the Witwatersrand, and are developed and delivered by the LINK Centre.

## The School of Public and Development Management



Wits University Graduate School of  
Public and Development Management

The Graduate School of Public and Development Management (P&DM) at the University of the Witwatersrand has, since its inception in 1993, been at the cutting edge of public and development management training and research.

Today Wits P&DM produces more postgraduate degrees in the field of public and development management than any other university in Southern Africa. Wits P&DM provides quality management education for leaders and decision-makers in the public policy and development fields.

The school is involved in a range of activities that include postgraduate degrees, executive management development, research and development support. Since the school's inception, staff have engaged in applied policy research and consulting to support the transformation process in South Africa and beyond.

As a student at P&DM, you will have access to academics with a practical understanding and knowledge of public and development management, public policy content and processes, cutting-edge research, and innovative teaching and learning strategies aimed at enhancing your professional skills and understanding.

## **Vision**

Africa's leading School of Governance.

## **Mission**

Growing management and leadership for public service, development and democratic governance through:

- Promoting learning through excellence in teaching and mentoring;
- Facilitating social dialogue to enhance policy formation and implementation;
- Fostering research to ensure quality academic output for social and economic development;
- Collaborating with international academic communities, especially those in Africa, to create and disseminate knowledge;
- Providing support to practitioner communities;
- Ensuring that the fundamental tenets of academic freedom and practice are always respected.

## **The LINK Centre**



The LINK Centre is a self-funded unit within Wits P&DM, providing training, research and consultancy services as a leading information and knowledge hub in the arena of Information and Communications Technology (ICT) in order to develop public, private, NGO and community-based capacity within the Southern African region.

The activities of the LINK Centre encompass the following areas:

- offering management education and training courses (degree, executive and certificate courses) in the broadcasting, information technology and telecommunications fields;
- leading a dynamic research programme that addresses critical issues relevant to the public and private sectors, communities and public / private partnerships and disseminating research findings;
- developing and collaborating on training and research programmes with other South African universities and technikons;
- building a global and continental network of information exchange and learning with selected universities and research centres internationally;
- providing public and development institutions throughout Africa (but specifically within the Southern African Development Community) with capacity building services in the areas of ICT policy, regulation and operations;
- conducting and hosting seminars and producing a policy research series and academic journal to increase the level of public awareness of Information Society issues and providing opportunities for debate;
- offering advice and information services to public and community-based and NGO institutions in the field of information management, information technology and telecommunications.

## DEGREE OVERVIEW

The degree of Master of Management in the field of ICT Policy and Regulation aims to provide a formal post-graduate academic qualification for senior staff engaged in policy-formulation and regulation of information communications technologies, a sector which is currently undergoing rapid change and experiencing continued expansion.

Information and communications technology (ICT) policy and regulation play critical roles in shaping the markets, services and technologies that increasingly define the economic and social environment of future information societies.

The need for ongoing development of national policies, together with a modern, effective regulatory regime, in order to facilitate the development of the communications sector as a basis for the development of citizen communication, e-commerce and e-government, requires the development of considerable, up-to-date skills and expertise.

This degree is designed to meet the needs not only of policy-makers, regulators and operators, but also of communication managers of large and small organisations, user and consumer groups, NGOs and others involved in or affected by ICT sector policy and regulation. It is intended for middle to senior level managers and practitioners working in the broad ICT sector across Africa – in the telecommunications industry; IT industry; broadcasting; trade unions; regulatory associations; government policy departments including communications, trade and industry, science and technology; science councils; university teaching departments; public sector ICT organisations, consumer advocates and the development sector.

The programme will provide an opportunity for participants to improve their professional skills or refocus their expertise in the field of ICT policy and regulation within a developing country context. The course provides an opportunity for participants to:

- expand and update their knowledge of ICT policy and regulation;
- test and explore new ideas and experiences;
- interact and network with leading academics and practitioners;
- reflect on personal goals, values and career.

## Learning Outcomes

On completion of all the requirements for the MM(ICTPR) participants will be able to:

- apply conceptual and analytical frameworks relating to information and communications technology policy and regulation within the context of their country and organisation;
- perform analytical evaluation and critical assessment to complex and rapidly changing information and communications technology organisational, regulatory and policy environments;
- apply appropriate conceptual and analytical frameworks to a range of issues and problems relating to information and communications technology policy and regulation within different institutional conditions and national contexts;
- communicate and present information in a range of written and oral modes and genres appropriate to the audience and applicable to the required task, using a range of technologies;

- access, process and analyse relevant information using a range of resources and technologies;
- demonstrate research competence, conceptualising, pursuing and presenting research into complex problems in contextualised ICT policy environments and formulating persuasive conclusions and recommendations.

## Content and Course Structure

The curriculum of the MM(ICTPR) aims to build core competencies critical for those active at a policy and leadership level in the broad ICT sector. These include: a grasp of global trends and market development affecting the sector; an overview of ICT technologies; the role of policy, law and institutions; approaches to regulation; universal access and service; allocation and control of ICT resources; costing and pricing.

For the coursework component of the MM(ICTPR), you are required to complete 9 compulsory courses. Of these, the 2 fundamental courses provide the broad contextual foundation and underpinning to the degree as a whole, while the 7 core courses translate these foundations into practical and applicable policy skills and expertise.

You will have the opportunity to specialise by selecting an elective course, and by completing a substantial research report in an area of your choice. This specialisation, together with the research design and methods course, enables you to build your knowledge, skills and understanding in a particular area to enhance your performance and career prospects.

You are recommended to register for 5 courses in your first year of study, five in your second, and the research report in your third.

The basic courses structure is provided below.

### 1.1.1 Fundamental Courses

The two fundamental courses for this degree are intended to provide foundational knowledge and skills for the degree as a whole. They provide the foundation for the subsequent core courses. It is therefore highly advisable that these fundamental courses are completed as early in your course of study as possible. You are required to complete and pass both fundamental courses.

<p><b>PADM7006 Global Trends Affecting ICT Regulation</b></p> <p>(year one)</p>	<p><b>Outcome:</b> You will be able to contextualise ICT policy formulation and sector regulation within the broad context of trends and developments in the sector.</p> <p><b>Content:</b> Global trends in information and communications technologies (ICTs): convergence, deregulation, liberalisation, privatisation; Impact of ICTs on the social, economic and political environment; Structure of the ICT sectors: from monopoly provision to competition; The regulation of the ICT sector: scope, principles, role and functions; Governance of ICT: global, regional and national institutions and initiatives.</p>
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<p><b>PADM5074</b> <b>ICT Technologies</b></p> <p>(year one)</p>	<p><b>Outcome:</b> You will be able to identify and conceptualise the technologies underpinning telecommunications and broadcasting, and of their impact on policy and regulation.</p> <p><b>Content:</b> Technologies and architectures of telecommunications networks; The public switched telecommunications network and circuit-switched networks; Wireless networks: fixed-wireless, mobile, GSM, 3G, WiFi; Satellite communications technologies; Broadcasting technologies and infrastructure; Optical networking, transmission, switching and architecture; Packet-switched networks, protocols and routing; IP telephony, voice over IP, broadband and next-generation Internet.</p>
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### 1.1.2 Core Courses

The core courses build on the foundation explored in the fundamental courses and develop your grasp of ICT policy formulation and sector regulation. It is advisable that these core courses are completed before proceeding to the research report. You are required to complete and pass all the core courses in order to complete the degree.

<p><b>PADM7007</b> <b>ICT Market Structures and Regulatory Reform</b></p> <p>(year one)</p>	<p><b>Outcome:</b> Given access to conceptual frameworks related to network industries and market structures through case studies and classroom based exploration of these issues, you will be able to understand the relationship of policy and market structures and the impact they have on the nature of regulation and the fulfilment of national objectives and sector performance.</p> <p><b>Content:</b> Economic characteristics of network industries, their structure and significance, Examining the relation between policy, market design and regulation in the case of South Africa, 2006 European Market Review + Belgian case study, Changing market boundaries and arising policy and regulatory issues</p>
<p><b>PADM7008</b> <b>ICT Policy, Law and Institutions</b></p> <p>(year one)</p>	<p><b>Outcome:</b> You will be able to identify and analyse the principles and institutions governing policy formulation, legislation and regulation of the ICT sector.</p> <p><b>Content:</b> Separation of powers: government, the regulator, operators; Policy formulation parameters and processes; Compliance with international treaties and commitments; Constitutional and legal frameworks of telecommunications; Law versus regulation; Inter-governmental relationships; Administrative justice and ethics; Public relations, negotiations and dispute resolution.</p>
<p><b>PADM5080</b> <b>Costing and Pricing</b></p> <p>(year one)</p>	<p><b>Outcome:</b> You will be able to identify and analyse principles and models of telecommunications costing and pricing.</p> <p><b>Content:</b> Cost and demand in competitive and monopoly markets; Accounting, economic and engineering costs, financial and management costs; Cost accounting in telecommunications: separation of accounts, CoA / CAM; Cost of services: facilities, interconnection, LRIC, FLIC, FDC, cost benchmarking; Pricing of services and tariffs: rate of return on investment, price cap; Price elasticities of demand, income elasticities; Peak and off-peak pricing; origination and termination charges; Connection; capacity, and usage charges</p>

<p><b>PADM5077</b> <b>Approaches to Regulation</b></p> <p>(year two)</p>	<p><b>Outcome:</b> You will be able to differentiate between a variety of regulatory models and assess their appropriateness to national contexts</p> <p><b>Content:</b> Approaches to regulation: competition, rivalry and monopoly power; Principles of regulation: independence, transparency, accountability; Instruments of regulation: policy, law, regulation, licensing; Content of regulations: interconnection; tariffs and price regulation; universal access; Licensing: principles, types and content of licences; Monitoring and enforcement.</p>
<p><b>PADM5078</b> <b>Universality and Quality of Service Regulation</b></p> <p>(year two)</p>	<p><b>Outcome:</b> You will be able to identify and analyse principles and regulatory models to promote universal service and access, and quality of service and consumer protection.</p> <p><b>Content:</b> ICTs and development: the digital divide, universal access and universal service; Access policies and strategies: models, approaches, institutional frameworks and funding of universality; Regulation and licensing to promote access: targets, incentives and monitoring; Funding mechanisms to promote access: subsidies and incentives ; Consumer protection: principles, standards, enforcement and dispute resolution; Quality of service: approaches, principles, standards, measurement and enforcement.</p>
<p><b>PADM7005</b> <b>ICT Resource Allocation and Control</b></p> <p>(year two)</p>	<p><b>Outcome:</b> You will be able to identify and analyse the principles of allocation and control of telecommunications resources.</p> <p><b>Content:</b> The electromagnetic spectrum and frequency band planning; Regulating the electromagnetic spectrum: allocation and assignment of frequencies; Allocation methods and their implications: administrative processes, bids &amp; auctions; Type approvals: emission restrictions and equipment standards; Rights of way, mast locations, co-location and access to facilities; Numbering and naming systems: number plans, number assignment, number portability.</p>
<p><b>PADM5086</b> <b>Research Methods</b></p> <p>(year two)</p>	<p><b>Outcome:</b> You will be able to design an applied research project and successfully use qualitative or quantitative methodology.</p> <p><b>Content:</b> This course covers the postgraduate research context; research skills; qualitative, quantitative and mixed method research methodologies; research proposal writing and research reporting. You will be required to submit an acceptable proposal for your research report in order to pass this course. The course is designed to take you through the various components of writing a proposal, doing research and writing a report.</p>

### 1.1.3 Master's Specialisation

Following the successful completion of the fundamental and core courses, you have an opportunity to specialise in an area of ICT policy and regulation. This process involves the completion of an elective course (in your chosen area of specialisation) and a substantial research report. Having completed a wide range of broad general courses to provide a grounding in ICT policy and regulation, you are now able to enhance your professional knowledge and understanding in a specific, focused area where your interest lies. The areas of choice are subject to lecturer availability and student choice. You will graduate with the degree of Master of Management in the field of ICT Policy and Regulation when you have successfully completed all the courses and the Research Report.

<p><b>Electives</b></p>	<p><b>Outcome:</b> You will be able to specialise and enhance your know in a particular area and practise advanced skills in problem identification, literature review, research and analysis.</p> <p><b>Content:</b> The content will deepen knowledge, skills and understanding in the area in which you choose to specialise. Elective modules include:</p> <ul style="list-style-type: none"> <li>• PADM5187: Monitoring &amp; Evaluation</li> <li>• PADM5081: Telecommunications Market Analysis</li> <li>• PADM7004: Broadcasting Policy &amp; Regulatory Trends</li> <li>• PADM7003: Content Regulation in the Information Age</li> <li>• PADM5082: ICT Applications</li> <li>• PADM5083: Telecommunications Policy Frameworks for the Digital Economy</li> <li>• PADM5084: Convergence and New Media in the Information Economy</li> <li>• LAWS5033 Advanced Broadcasting Law</li> <li>• LAWS5046 Cyberlaw</li> <li>• LAWS5013 Intellectual Property Law</li> <li>• LAWS5025 Media Law</li> <li>• LAWS5031 Space and Satellite Law</li> <li>• LAWS5026 Telecommunications Law.</li> </ul>
<p><b>Research Report</b></p>	<p>In order to obtain a Master's degree, you are required to complete a research project and submit a research report of around 35 000 – 45 000 words. The aim of the research project is to challenge you to apply analytical and applied research techniques to a topic chosen from your area of specialisation. You will be assigned an adviser who will supervise and guide the preparation of the research report. The learning objective of the report is to give you an opportunity to demonstrate how you can self-manage a problem solving exercise or research project on a topic of your own choice within limited time and resources.</p> <p>Through the research report, you will demonstrate that you can design, execute, analyse and report on such work. You have to show that you can do this in a coherent and logical way, and meet the standards appropriate for an applied research project in an academic environment.</p>

Three textbooks are recommended as your core course reference material. Copies are available in the LINK Resource Centre as well as in the Management Library so that participants can use them during the course. However, all are available online and participants are encouraged to download them for reference purposes. They are:

- Intven, H (ed) (2000) *Telecommunications Regulation Handbook*, available online at <http://www.infodev.org/en/Publication.22.html>
- Melody, W (ed) (1997) *Telecom Reform, Principles , Policies and Regulatory Practice*, available online at <http://lirne.net/live/content/view/7/38/>
- Mansell, R, Samarajiva, R & Mahan, A (eds) (2002) *Networking Knowledge for Information Societies: Institutions & Intervention*, available online at <http://lirne.net/live/content/view/11/42/>

## 2

## Research Guidelines

Candidates for the Master of Management in the field of ICT Policy and Regulation are required to undertake and document **research** in partial fulfilment of the requirements for the degrees. In order to complete this process you will be required to:

- Select a suitable research topic;
- Secure a supervisor;
- Prepare a research proposal;
- Present the research proposal for approval within P&DM and to the Faculty;
- Undertake the approved research proposal;
- Prepare a Research Report for submission and examination.

A Research Report is a report on a focused area of applied research conducted in a short period of time. ***It is not a*** full master's dissertation, a PhD thesis or a consultant's report. These you can do at a later stage.

The purpose of the research report is to give you, the learner, an opportunity to demonstrate how well you can self-manage a substantial problem-solving exercise or research project on a topic of your choice within limited time and resources.

Through the research report, you will demonstrate that you can design, execute, analyse and report on such work. You have to show that you can do this in a coherent and logical way, and meet the standards appropriate for an applied research project in an academic environment.

The research report process provides an opportunity for you to integrate your knowledge across the range of topics studied during the MM(ICTPR) course, while specialising in a targeted focus area of your choice.

## THE RESEARCH REPORT PROCESS

Steps	What you have to do	Date	Done?
1	Find out about the Research Report process. Know exactly what you have to do every step of the way. <b><i>Make a note of all deadlines that relate to your registration.</i></b>		
2	Find a supervisor. You should find a supervisor who is able and willing to supervise in your area. Once you have spoken to the person, then e-mail the Research Manager with your name, year of registration and the name of your supervisor. If you are not able to find a supervisor, you will be allocated to someone who is available.		
3	Choose a topic (if you haven't already done so); discuss it with your supervisor.		
4	Work out a time management plan and discuss when you will give drafts to your supervisor.		
5	Prepare your 12-page proposal. Remember to follow the format and specifications in the Guidelines. Also remember that you will probably have to do two to three drafts so budget for this time. Also remember that the proposal is the exam equivalent assignment for PADM5086 Research Methods.		
6	Attend a proposal committee. Check with the Research Administrator when your committee will be held.		
7	Your proposal committee meets. Attending will be your supervisor and two other academics. You will give a five-minute presentation, a discussion will take place, then will leave while a decision is made on your proposal.		
8	Your supervisor informs you of the outcome of the proposal committee. At the same time, your supervisor informs the Research Administrator of the names of the people who have agreed to act as internal and external examiner.		
9	If changes to your proposal are required, you need to do these, get your supervisor to approve the changes and return your revised proposal to the Research Administrator within a <b><i>week</i></b> . It is <b><i>your responsibility to get your revised proposal to the Research Administrator</i></b> . The proposal must have a cover page, be in the required format and be free of errors.		
10	The Research Administrator sends the revised proposal to the Faculty Office who will forward it for approval by the Faculty Higher Degrees Committee.		
11	The Faculty Office will inform you as to whether your proposal has been accepted or not. They will send you the title approved by the Post-Graduate Committee. This is the title that must appear on your bound Research Report. If you want to change the title, you must ask the Faculty Office <b><i>in writing</i></b> . If the title on your bound copy does not match the one on Faculty records, you will be asked to change it and rebind your Research Report. It is <b><i>your responsibility</i></b> to check this.		
12	Start your research and the writing up of your Report. Work out a time schedule with your supervisor. Take into account that you will probably need to do three drafts. Remember your deadlines.		
13	Once your Research Report is finished and both you and your supervisor are happy with it, you may want to get it edited.		
14	Check with your supervisor that your Report has the specified format and is free of errors.		

<b>Steps</b>	<b>What you have to do</b>	<b>Date</b>	<b>Done?</b>
<b>15</b>	You then hand in four <b>bound</b> copies and one unbound copy of your Report to the Faculty Office. The Faculty Office will require you to fill in some forms.		
<b>16</b>	Have a holiday!		

## SELECTING A RESEARCH TOPIC

As a first step in the research report process you have to identify a research topic. P&DM sets three requirements in respect of the MM(ICTPR):

- The topic must have an ICT policy or regulation focus;
- The problem must be amenable to an applied research approach;
- An appropriate supervisor must be available for the topic.

Despite efforts to create distinct disciplines, the practice of ICT policy and regulation remains eclectic and inter-disciplinary. The ICT policy-maker or regulator is likely to work across technical, cultural and functional boundaries and to draw on a variety of disciplines: public administration, political studies, economics, law, sociology, statistics, engineering, etc. Your research is therefore likely to be either multi-disciplinary or interdisciplinary.

Applied research is problem-driven. It:

- is intended to lead to the solution of specific problems;
- usually involves working with clients who identify problems and who ultimately get results and recommendations of the research;
- often feeds into a decision-making process, and is therefore likely to be subject to tight time frames;
- is firmly hooked into an understanding of appropriate bodies of theory;
- means that the applied researcher collects information in a systematic way, reports on such findings and adequately and systematically analyses the information collected, making the necessary connections to existing knowledge.

An applied research report is not the same as a consultant's report. Its goal is not to make recommendations or draw conclusions (although these may well emerge from the work) but rather to demonstrate the links between the existing body of knowledge relevant to the field and what has been discovered in the course of the research

In order to gain academic approval, the report also has to move beyond pure description towards explaining and analysing what has been discovered.

Research topics undertaken by previous MM(ICTPR) students have included:

- A comparative perspective on interconnection in India and South Africa
- Access to Information
- ADSL Uptake and Regulatory Intervention in South Africa
- Applying lessons from bulk infrastructure policy to ICT infrastructure
- Effects of communications sector reform on network technology deployment in Lesotho
- Evaluating the WASPA Code of Conduct
- ICT use in female-headed households
- ICT4D and the developmental state
- Interconnection rates and the community payphone model
- Mobile number portability in South Africa
- Open access models and undersea cables
- Telecoms reform in Mozambique
- The effect of investing in ICTs on the profitability of SMMEs
- The impact of new media on public service broadcasting
- Universal service and access policy in South Africa

## **Guidelines for selecting a topic**

The following checklist may help you to decide whether or not a chosen topic is suitable.

### **1.1.4 The Need for Research**

The selected topic must be in a field where there is a real need for research. It must be within the broad field of information and communications technologies and must have policy or regulatory relevance. In addition, the outcomes should not be obvious, trivial or predictable. The results should be obtainable within a time frame short enough for them to remain useful and relevant.

### **1.1.5 Amenable to Research Methods**

Even if a research topic meets the above criterion, it also has to be suitable for formal research methods. P&DM requires evidence of sources of information on the research project.

### **1.1.6 Achievable within a Reasonable Time**

You should budget for roughly 600 - 800 hours to complete the research project - much more if you have little or no previous research experience. Make sure your topic is manageable within this timeframe.

### **1.1.7 Useful, Whatever the Outcome**

A research project usually has more than one potential outcome: analysis of the data collected may support a proposition, not support it, or prove to be inconclusive. Don't pick a topic where only one possible outcome would be academically interesting.

### **1.1.8 Interesting to you and within your Abilities.**

Research can be difficult, lonely and often frustrating. If your chosen topic is not interesting to you, or is beyond your ability, you may be tempted to give up before you complete. You will invest much time and effort in the research report — choose a topic that will help your professional or personal development, and which relates to issues and information you deal with on a daily basis.

### **1.1.9 Affordable**

Completing the research project involves many costs. Normally, you are expected to cover all these from your own resources. So look carefully at what your proposed topic and methods are likely to cost (communications, travel, producing questionnaires, using typists and editors, etc) and make sure you can afford them.

## SELECTING YOUR SUPERVISOR

You are initially responsible for identifying, approaching and attempting to secure your own supervisor. You are allowed to approach any member of the academic staff (full-time, part-time or honorary). **You must let the research office know who your supervisor is.** In general, it is advisable to select a topic which can be adequately supervised within P&DM - although in exceptional circumstances we will consider allowing a research student to approach someone from outside the school. If you are not able to link up with a supervisor, you will be allocated a supervisor.

If you use a supervisor who is not in a full-time academic position with P&DM, a co-supervisor will be allocated to you from P&DM staff to serve as the link between your supervisor and P&DM.

### External supervisors

All P&DM academic staff have to supervise (as first supervisor). P&DM has to pay when we employ outside supervisors, so please

- check what relevant supervision is available inside P&DM;
- check whether all relevant P&DM supervisors already have full supervision timetables before you look elsewhere for a supervisor.

If you plan to use a research supervisor who is not a full-time academic at P&DM, make sure that you tell the MM Research Administrator about this. P&DM needs to draw up a contract with an outside supervisor to make sure that s/he understands the responsibilities and conditions of supervision.

### The supervisor / student relationship

YOU need to drive the process. You set dates to negotiate with your supervisor, you prepare for meetings, do drafts, etc. Don't wait for your supervisor to tell you what to do. The ultimate responsibility for understanding what your project is about and ensuring that the work gets done rests with you, the student, not the supervisor.

#### **You can expect your supervisor to:**

- Guide you in your research;
- Give you some indication of where to look for literature;
- Read through a minimum of one draft of your Research Report and give you feedback (you can ask for written feedback);
- Give you some guidance on how to analyse your data;
- Attend proposal meetings with you;
- Stick to agreed deadlines for returning your drafts (maximum two weeks) if you have submitted you work on time.

#### **You can't expect your supervisor to:**

- Be available 24 hours a day;
- Provide you with all the references for your literature review;
- Correct your spelling, grammar, correctness of data, references;

- Keep you motivated;
- Keep your deadlines;
- Be responsible for the content and presentation of your report;
- Drop other commitments when you need to meet a deadline and are under pressure.

**To avoid time problems**, you need to plan very carefully about when you need your supervisor. Negotiate these plans with your supervisor. Stick to them as much as possible. Don't miss meetings.

Check the busy periods for supervisors and plan accordingly: around research report and proposal deadlines, after research report deadlines because they are marking, exam periods, holiday periods.

Your supervisor has to declare that the research report is being submitted with his/her approval. If the research report is submitted without his/her approval, then s/he is not obligated to mark it. You are entitled to submit without your supervisor's approval – but think carefully about this.

If you want to change supervisors do this as early as possible. If conflict arises, contact the Research Administrator. The relationship between the supervisor and student should be based on mutual respect and shared interest.

# TIME MANAGEMENT

Part of the task of doing a research report for the MM(ICTPR) degree is to manage a research project within a limited time period. This means thinking carefully about time management and working out a research strategy. You probably have your own ideas about working out a time management plan. Here is one example:

## *Step 1*

Keep a rough 24 hour diary for three days to see exactly what you spend your time doing. See where you can schedule in research work.

## *Step 2*

Mark your major deadlines on a year planner. Work back from these deadlines and calculate how much time you need to write up the report and to do the research.

Generally, you need to work out a plan on a yearly, monthly, weekly or daily calendar. Include major deadlines, research time, writing time, editing time, class time, social and relaxation time. Also mark in holiday periods, etc.

## *Step 3*

Work out where your time is being wasted. Try to use this time more effectively. (Time wasters: disorganisation, procrastination, inability to say 'no', burn out, telephone calls, waiting, meetings, constantly dealing with crises).

## *Step 4*

Give yourself time to relax, do exercise and recharge your batteries.

## *Step 5*

Reward yourself when you achieve your targets. This will help you to stick to your deadlines.

## *Step 6*

Assess your time management plan all the time.

## Timesavers

- Spend time at the beginning conceptualising your research carefully.
- Work out a do-able research strategy with a timetable and stick to it.
- Keep to the 130-page requirement.
- Sort out your referencing at the beginning. Make sure you have all the referencing information such as place of publication, publishers and page numbers. Make use of a referencing support tool such as RefWorks, EndNote or ProCite.
- Work out a strategy for analysing your data at the beginning.
- Decide on a format and use that from the beginning.
- Work out a chapter outline at the proposal stage.
- Work out your argument and structure of the Report as soon as you can.

- Limit the time you spend on your proposal.
- Try to use courses to overlap on your research.
- Keep a research diary – you can jot down ideas as you go along instead of trying to think of them all at the end.
- Work on your research project consistently so that you don't need to spend time familiarising yourself with where you left off. In other words build in time every week to work on your research.
- Consider using a reputable professional editor (if you can afford one) if English is not your first language (the Faculty Office or the Professional Editors' Group <http://www.editors.org.za> can assist).

**Remember:**

- To build in time for writing (at least two months)
- To build in time for editing and fixing up the final draft (at least two months)
- To have some extra time in case things don't go as you planned.

## **PADM5086 RESEARCH METHODS.**

This course is designed to assist you to develop your proposal and to engage with some key methodological and practical issues related to conducting research. Opportunities are provided for 'hands on' work on your proposal during the course. The course has an attendance requirement of at least 80% of classes.

Your exam equivalent assignment for this course is a completed version of your proposal. This must be submitted on the due date and deferred exam applications will be treated in the same way as for other courses. You are expected to submit whether you have discussed the assignment with a potential supervisor or not, although it is clearly in your interests to have done so. After the assignment has been marked PASS you will have another month to work with your supervisor to improve the assignment for the proposal committee. Your supervisor must sign off your proposal to confirm that it is ready for the proposal committee. If you receive a FAIL you will have to repeat the Research Methods course the next time it is run, and submit your proposal by the next due date.

### **1.1.10 Criteria for receiving a PASS for Exam Equivalent Assignment**

Candidates are expected to:

1. Provide a brief context for the research – brief background to the area of research.
2. Formulate a problem statement & research question(s) appropriate to scale and timing of research. The research must be 'do-able' in the time frames allowed and the research question/s sufficiently focused to either stand as they are or to require only slight modification by supervisors and proposal panels.
3. Indicate methodology to be used (appropriate to the research question). As this is a course about methodology the expectation is that you have read up on your methodology and are able to explain how and why you will take certain approaches to gathering and analysing your data and are aware of implications of these choices and limits to your approach.
4. Identify key literature to be used – this can be a selected annotated bibliography with introduction and concluding/ summarising section that identifies a way of organising your literature according to themes/debates/ concepts or frameworks. You should make use of 20 - 30 key academic references.
5. Made sure that the assignment is spell checked and coherently written (SA English) – a finished product not first draft!
6. Used correct formatting and layout (including correct use of APA referencing). Please use 1,5 spacing and follow the guidelines in the Style Guide for research proposals. Please put a footer on each page with your name and student number.
7. Appropriate length (3 000 - 4 000 words – 10 - 12 pages).

# THE RESEARCH PROPOSAL

A proposal is a plan of action. It serves two purposes:

1. To map out how you are going to do the research.
2. To show the proposal committee that you have thought through your research, conceptualised it thoroughly and understand the academic debates and the context within which your research is situated.

An approved research proposal also serves as an agreement between all parties that data may be collected and the study may be completed according to the proposed plan. After it has been approved, the supervisor and members of the proposal committee cannot demand significant changes to your plan, and neither can you make significant changes to the study. But you must still adopt a flexible approach and keep an open mind on your research proposal, revisiting it whenever necessary to 'fine-tune' your plans.

Once finished, your proposal should guide you and keep you focussed during the research process.

## The Contents

The research proposal should contain:

- Your research question;
- The academic debates around this question;
- How you will do the research: research methodology, design, strategy.

For these reasons, a good proposal centres on **a review of the relevant literature, a statement of the problem**, a purpose statement, the **associated questions** or **hypotheses** and a clear description of the **methodology** planned for **data collection and analysis**.

**In your proposal you must:**

- Clearly state the essence of the problem and the questions which it raises in your mind;
- Convince doubters that the research is useful;
- Develop a solid rationale for the main focus of your proposed study;
- Develop a research design that will help you to realise the objectives of your research;
- Demonstrate your competence to handle the research, both by what you write and how you write it.

**The research proposal should contain the following broad outline:**

- **Title and cover page;**
- **Introduction / background / problem statement;**
- **The purpose of the research;**
- **Literature review (conceptual framework);**

- **Research question;**
- **Research methodology;**
- **Research strategy;**
- **Draft chapter outline;**
- **Limitations of research;**
- **References;**
- **Appendices (for example, questionnaire).**

### 1.1.11

### 1.1.12 Cover page

The cover page should include:

- A title;
- Your names and student number;
- Your supervisor's name or information on who you have already approached for supervision;
- The school;
- The degree for which you are registered and the year in which you first registered;
- Your contact telephone number and e-mail address.

#### **Title**

The title of the research report is very important. It should:

- Reflect the essence of your study
- Contain relevant keywords so that anyone can look it up in the library
- Be **less than 13 words** (this is a Faculty requirement)

#### **Remember:**

- If the research is conducted in South Africa, it is usually unnecessary to use the words 'South Africa' in the title.
- You don't need to say 'A (case) study of ...'
- It is better to avoid the word play, puns and journalistic clichés. Unlike headlines in popular publications, the purpose of a research report title is not to sell what follows, but simply to give prospective readers a real picture of what the report contains.
- The Higher Degrees Committee permits no double-barrelled titles. This means you cannot have a colon (:) in your title.
- Abbreviations and acronyms are not, as a rule, permitted in the title.

#### **Important! Important!**

Once your title is accepted by your Proposal Committee, it is sent to the Higher Degrees Committee. Once the Committee accepts it, the Faculty Office will send you a letter with your title on it. This is the title you must have on your final research report. If you want to change it, you need to do so in writing to the Faculty Office by formally submitting the proposed new wording with a motivation and a note of support from your supervisor to the Assistant Registrar in the Faculty of Management. If you change the title without permission from the Faculty Office, they will ask you to rebind your final copies. This is something **you** need to check. If you don't get a letter from the Faculty Office about your title, you must follow up on this.

### **1.1.13 Introduction / background / problem statement**

This is where you introduce your research problem in a general and discuss why it is interesting and useful to research. This section should introduce the reader to the context and map out the path to be followed in the rest of the proposal. This section sets the tone for the paper. This is where you identify the problem, so include a problem statement.

### **1.1.14 Purpose of the research**

Explain what the purpose of your research is. Complete the sentence: The purpose of this research is to...

### **1.1.15 The Literature Review**

The literature review presents an **argument** within academic literature to show the need for your research. It is here that you unpack the concepts in your research question and discuss the relationships between them. A complete literature review is not necessary at the proposal stage, but you must show that your research is situated within the context of the relevant literature and that you understand the issues and debates.

You may want to indicate areas of further literature review by, for example, appending an annotated bibliography to your research proposal. However, your job here is not to describe or summarise readings. Your task is to show your understanding of how the academic debates shed light on your proposed topic. This means that your literature review must be organised thematically around the issues and debates.

### **1.1.16 Research Question**

You need to:

- Link your research to your argument in the literature review
- Provide a focused research question (in the form of a question)

Here you can also tell your reader, more specifically, what the essential issues are. You can give a brief background to the problem and your rationale for conducting the proposed research. Tell readers why the specific problem was selected and what the relevance of the topic is to public and development management or policy.

Specify the scope of the research clearly by stating both what you will examine, and what you will exclude. Too broad a scope will inevitably result in you running into severe resource problems. Too narrow a scope may render the results irrelevant or predictable.

### **1.1.17 Research Methodology**

This section should explain the following:

- Your methodology: why you have chosen it, why it is appropriate to your research, why you think this method will produce valid results and how reliable it is - support your approach by detailed reference to the relevant academic literature;
- Your methods of data collection (If you are using questionnaires, you need to discuss what type of questionnaire/questions and why you have chosen this. Also include a copy of the questionnaire and an indication of who you will interview);

- How you expect to show that your data is reliable (i.e. different sources);
- Your methods of data analysis. How are you going to analyse the information you get?

Your account should be as detailed as possible and, once again, you should develop an argument.

If you are doing survey research, you must also include:

- The population to be researched;
- The size of the sample to be used and the method of sampling;
- At least a draft of the questionnaire or discussion outline;
- Arrangements for piloting of the questionnaire;
- A table illustrating: which elements of the questionnaire you will use to assess which hypotheses, propositions or research questions; and what methods of analysis you will use to support the conclusions you draw from the results.

The instructions need to be detailed and clear enough that any other researcher could follow your instructions, and come up with the same data and analysis. Try testing them out on a colleague!

### **1.1.18 Research Strategy**

This section outlines the logistics of your research. Here you give a step-by-step account of where you will begin through to where you end the research. You can do it in a table format where you include a time-line. Remember to include time for writing and editing. The proposal committee will want to see that you have taken this into account. You need to think about this carefully and realistically.

### **1.1.19 Limitations of Research**

This section of the proposal should indicate any shortcomings and limitations to your research, anything that may limit its validity or undermine its wider applicability. This could include factors such sample size, representivity of sample population, researcher bias, shortcomings in the data model, time or financial constraints. It is a strength rather than a weakness of good research to recognise its own limitations rather than having them pointed out by detractors.

### **1.1.20 References**

All the sources listed in your proposal should be properly listed in alphabetical order in this section. It is essential that you use the correct referencing format. Do not include works that you may use but have not yet specifically referenced.

### **1.1.21 Appendices**

Questionnaires and lists of interviewees can be attached as appendices.

## The length and format of the proposal

Your research proposal should be approximately 10 to 12 pages long, using the recommended 1,5 line spacing and a 12-point letter size in one of the following fonts (typefaces): Times New Roman, Arial, Century Schoolbook, CG Times or Century Gothic. Choose ONE typeface because it makes your document more attractive and readable, and stick with it throughout.

It is important that your proposal looks presentable and is a final product. It has to go to the Faculty Office. Number your headings, make sure all the same level headings are the same size and make sure that you have run a spell check and that there are no errors. All your pages must be numbered and it is a good idea to put your name in small font as a footer.

## Proposal Committees

The research administrator will set up proposal committees once the supervisor has approved. The committees take place within blocked periods of time during the year. so that academics are available during this period. You will be advised of these dates and need to keep them free.

To make sure that administrative arrangements run smoothly, you must:

- Supply the research administrator with 3 hard copies of your research proposal by the published deadline for your proposal committee meeting;
- Attach a written note (or email) from your supervisor giving her/his consent for the convening of your proposal committee;
- Email the research administrator an electronic copy of the final approved proposal.

### 1.1.22 Approval of research proposal

Quality control on your proposal happens at P&DM, through:

- Your supervisor;
- Your proposal committee.

Your proposal committee is made up of:

- your supervisor(s);
- two other academics from your particular learning area.

*You are entitled to suggest one relevant academic or practitioner for this committee. The Research Administrator will convene the committee – this is whom you have to liaise with to set up your meeting.*

Your supervisor and proposal committee are likely to ask the following questions when evaluating your proposal:

- Is the research topic significant, relevant and interesting?
- Has the research problem been defined adequately?
- Has the relevant literature been considered?

- Has the theory base found in the literature been adequately related to the research problem?
- Has the student clearly articulated the research questions/ sub-questions which will guide the study?
- Have tentative solutions/ relationships been identified (in the form of propositions, hypotheses, a well-developed argument or a very stimulating set of questions)?
- Is the general approach to the research outlined and the choice satisfactorily defended?
- Have the unit(s) of analysis been identified?
- Has an appropriate research design been proposed which will allow the researcher to successfully study the identified topic/ problem?
- Is the student clear on which population s/he is planning to study? If appropriate has sampling procedure been described?
- Are research techniques linked to various research questions?
- Have research media and instruments been developed for each technique to allow reflection on all research questions and sub-questions?
- Is the student clear on which analytical methods will be used on what data, in order to answer which questions?
- Is the proposed methodology appropriate?
- Can the student cope with the proposed methods and techniques?
- Is the literary style and referencing according to P&DM standards and requirements?
- Is the proposed time frame feasible?
- Is it likely that the research might contravene acceptable ethical standards? If this danger exists, does the researcher propose suitable measures to prevent this?

### 1.1.23 Procedure for approval of your proposal:

1. You develop your proposal to a level where your supervisor and you are satisfied that it is of an adequate standard to be submitted to your proposal committee.
2. You then present to your proposal committee. The members of the committee will question you about the proposal and can do the following:
  - **Accept** it as it stands and approve it for submission to the Post Graduate Committee of the Faculty of Management. (This constitutes a **pass**);
  - Approve the proposal, subject to you making **minor improvements** before final submission. (If this happens, your supervisor and the Programme Manager: research will need to look at your revised proposal again before it is submitted) - (This constitutes a **pass**);
  - Approve of the study area but ask you to make **substantial improvements**. Before you can proceed with the research you will have to make these improvements and the amended proposal will be circulated to all members of your committee for written comment and a recommendation - (This constitutes a **pass**);
  - **Reject** the proposal because it is inadequate or inappropriate. (If this happens you must produce a new proposal and go through the entire proposal committee process again) - (This constitutes a **fail**).
3. When your proposal has been approved by P&DM, it is sent to the Higher Degrees Committee. This committee considers your proposal at its next meeting and registers the title and your due date, as well as officially confirming your supervisor, internal examiner and external examiner.

The Faculty Office will formally advise you of the title of your research report and your supervisor (and co-supervisor if applicable). This title is the only title under which you are allowed to submit your final report.

#### **1.1.24 After the proposal committee:**

Your supervisor will inform you about the changes that need to be made. You need to make these changes, confer with your supervisor and give a copy of your revised proposal to the Research Administrator. **It is your responsibility to do this. If you don't, it may result in your research not being registered.**

# THE RESEARCH REPORT

The following comprise the components of the average research report. Some do vary a little and this is fine, although it should be agreed with your supervisor.

## Title Page

The title page of the research report should be laid out as follows:

**Title:** Your title has to *correspond exactly to the one approved by the post-graduate committee*. The title should be typed in capitals with two spaces between each word, for example:

THE REGULATION OF INTERCONNECTION IN SOUTH AFRICA

**Author's Name:** Give your full first names and surname. Type the names in upper and lower case letters as appropriate, for example:

Thandi Marie Zwane

**Statement:** You need to add the following statement about the status of the document:

A research report submitted to the Faculty of Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management (in the field of Public and Development Management).

**Date:** Give the month and year of completion of the research report, for example,

February, 2006.

**Example:**

<p>THE REGULATION OF INTERCONNECTION IN SOUTH AFRICA</p> <p>Thandi Marie Zwane</p> <p>A research report submitted to the Faculty of Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management (in the field of Public and Development Management).</p> <p>February 2008</p>
---

## Abstract

Type the abstract on a separate page. It should be no more than 150 words long. It should start with a sentence describing the major theme of the topic researched and continue by very briefly outlining the purpose of the research, the methodology used, the main findings and conclusions.

Here is an example of an abstract for a research report titled *Consumer Perceptions of Environmentally Friendly Products*:

'During the past decade, concern for the environment has emerged as a major socio-political issue among developed nations throughout the world and the increase in the number of environmentally friendly or 'green' products has been significant. The purpose of this exploratory study was to determine the types of products that are considered to be environmentally friendly as well as establishing consumer perceptions of these products. One of the main findings of the research was that 'green' products have achieved substantial awareness among consumers and they are not regarded as gimmick or a fad. It was also established that the two main barriers that discouraged consumers from purchasing green products were a perception that such products were not price competitive and scepticism regarding their supposed environmental benefits.'

(128 words)

## Declaration

The following declaration should appear on a separate page:

I declare that this report is my own, unaided work. It is submitted in partial fulfilment of the requirements of the degree of Master of Management (in the field of Public and Development Management) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

The name and signature of the student and the date should follow this declaration, for example:

---

Thandi Marie Zwane  
14 February, 2008.

## Dedication

The dedication is optional. It should appear on a separate page. This is a brief statement paying tribute to the author's family, friends or any other people or organisations associated with the author or the research, for example: For Modiegi, with thanks.

## **Acknowledgements**

Although this section is also optional, it is conventional for authors to acknowledge the role of their supervisors and other people and organisations instrumental in the completion of the research.

The acknowledgement should appear on a separate page, for example:

I am grateful to my supervisor, Prof. Mark Swilling for his guidance throughout the research process; Dr Mike Muller for his assistance with the statistical analysis of the data; The DBSA for making the basic data available; Pearl for her endless patience in the typing and retyping of this research report. Without their assistance, this research would not have been possible.

## **Table of Contents**

This is usually headed 'Contents' and includes the page numbers on which preliminary material, chapters and section headings, references, bibliography and appendices begin. The first page of the text is normally numbered Page 1. Any material after the contents page(s) but before the first page of the text is numbered in small Roman numerals ( i, ii, iii, etc.).

You are strongly advised to use the automatic table of contents generation facility of your word-processing program to do this.

## **Glossary of Terms**

When the research is conducted in an area that is rich in technical terminology which the average reader may not be familiar with, you should provide a glossary of terms. List these terms, and their definitions alphabetically. Where possible you should provide a reference for the source of each definition.

## **List of Abbreviations**

This section is optional and should only be used when you have devised your own abbreviations for commonly used terms, e.g. SMT for strategic management team. This list should only be included when there is a significant number of such abbreviations — 6 or more. List the abbreviations alphabetically, together with their meanings.

## **List of Tables**

This section is optional and depends on your own stylistic preferences and the nature of your research topic. Tables, in the text, containing details of the analysis performed, should be numbered sequentially, and the list of tables should present the table number, its title and the page on which it can be found.

Again use your word-processing program to generate this.

## List of Figures

This section is also optional and the same guidelines as for the list of tables apply, including the use of your word-processing program to generate it.

## The Body of the Research Report

In a conventional research report, the text is divided into logical chapters. The title and structure of chapters will depend on the natural logic of the topic being researched.

The *following components need to be present in your research* report but how you decided to present them is up to you:

### 1.1.25 Introduction/background:

This section sets the context for your research report. This is where you explain where your research question arises and provide some background, and is in part an expansion of your problem statement. Since it is the first chapter, you should also explain to the reader how you will take them through the research report. Including a summary of the chapters which follow is a good idea. This section sets the tone for the report.

### 1.1.26 Literature review:

The literature review presents an argument within academic literature to show the need for your research. It is here that you unpack the concepts and definitions in your research question and discuss the relationships between them. You must show that your research is situated within relevant literature and that you understand the debates. This section identifies your conceptual framework

The links between your research and gaps, comments and conclusions about the broader literature must be made clear. Your job here is not to summarise what others have said. Your task is to show your understanding of how the academic debates shed light on your proposed topic.

### 1.1.27 Research problem, research question:

In this section, you explain your research question. You need to:

- Link your research to your argument in the literature review
- Provide a focussed research question (in the form of a question)

Here you can also tell your reader, more specifically, what the essential issues are. You can give a brief background to the problem and your rationale for conducting the proposed research. Tell readers why the specific problem was selected and what the relevance of the topic is to public and development management or policy.

Also include the statement: The purpose of this research is to ....

### 1.1.28 Discussion of research method and how data / information was collected

This section should explain the following:

- Your method: why you chose it, why it was appropriate to your research, how method produced valid results and how reliable it was.
- Your methods of data collection – where you went, who you questioned, etc (If you used questionnaires you need to discuss what type of questionnaire/questions and why you chose this.)
- How you can show that your data is reliable (i.e. different sources)

Your account should be as detailed as possible and once, again, you should develop an argument.

If you are doing survey research, you must also include:

1. Population and Sample
  - 1.1 Research Population
  - 1.2 Sample Size
  - 1.3 Method of Sampling
2. Research Instrument
  - 2.1 Justification of the Questionnaire
  - 2.2 Reliability and Validity

(The methods section does not have to be a separate chapter.)

### **1.1.29 Presentation of research data / information**

The results of the research should be presented in your Research Report. Try to paint a picture for the reader on the topic of your research. If you are using the case-study method, this is where you present the case. Tables and figures and quote from interviews are examples of research data.

### **1.1.30 Analysis of research**

At some point, you need to focus on the meaning of the data you have collected in terms of the hypotheses/ research questions and underlying theoretical concepts. You should also make extensive reference to the themes, issues and debates set out in your literature review. You need to give significance to the raw data by setting out for your reader an in-depth and thoughtful analysis.

### **1.1.31 Conclusions / recommendations**

In the final chapter, you round off the research process. You may want to provide a few overall conclusions or additional insights on the data, the methodology or the analysis. You may also want to provide some recommendations. If you feel your project was restricted, you may want to point to further research.

As mentioned before, these do not have to be separate chapters. As long as these components are included, you can let your research dictate the order and structure of the report.

## **Template for writing up research**

A template for writing your Research Report is provided here. This is an *example*, you may choose to present your research differently. Discuss this with your supervisor.

**Chapter 1:** Introduction (includes background, research problem, research question, discussion of research method and how data/information was collected).  
**Chapter 2:** Literature review (argument linking your research to current academic debates)  
**Chapter 3:** Presentation of research problem (and hypothesis to be tested)  
**Chapter 4:** Discussion of methodology (and its limitations)  
**Chapter 5:** Presentation of research results (and analysis)  
**Chapter 6:** Detailed analysis of research results  
**Chapter 7:** Conclusions and recommendations (and suggestions for further research)

**Note:** You do not have to have seven chapters, you may find you need less. Give your chapters interesting titles which give the reader an indication of what will be discussed in the chapter. For example, instead of 'Chapter 3: Presentation of results' have 'Chapter 3: A Case Study of World Vision'.

## Pages at the end of the Report

### 1.1.32 References

The text of the research report should be followed by a list of references, strictly in accordance with the format prescribed in the P&DM Study Guide under the section on References.

**DO NOT LIST BOOKS, JOURNAL ARTICLES AND REPORTS SEPARATELY.**

**DO NOT NUMBER YOUR ENTRIES.**

**DO NOT INCLUDE ANY REFERENCES NOT CITED IN THE BODY OF YOUR REPORT.**

### 1.1.33 Appendices

Although this is an optional, it is likely that your research report will have some detail presented in Appendices. Appendices should be numbered sequentially and titled. Numbering order should follow the order in which the reader encounters references to them in the text — Appendix 1 should be referred to in the text before Appendix 2. Each appendix should contain a single, complete set of material, e.g. the questionnaire and the detailed output of some statistical analysis should be placed in separate appendices.

## Formatting Conventions

- Each chapter should start on a new page and be given a title.
- The typeface you choose, the way you use capitals or bold letters, italics, underlining, etc. should be consistent throughout the Report.
- Each section and sub-section in the chapter should be numbered, titled and emphasised. A 'decimal' numbering system is usually the easiest to follow, but you should try not to go beyond two levels of sub-headings.
- If you use an alternative format or style, please ensure that it is consistent. Chapter headings, section headings and sub-headings should follow the same styles throughout.
- Tables and Figures must be labelled, numbered and referenced.

- Direct quotations should appear in double quotation marks (“...”) and any insertion of words noted in square brackets, e.g.:

Groenewald (1986, p34) states that “[this] limitation follows from the fact that not all documents about a given matter remain available”.

- Quotations within quotations should be set inside single quote marks.
- Foreign words should be written in italics.
- The use of underlined, italicised or bold print to add emphasis in the text (as opposed to headings) should be limited and preferably avoided.
- Spelling should be in accordance with UK English (not American English) usage. Use the Oxford English Dictionary as the authority, and use your word-processor to set the language accordingly.
- However, do not correct the spelling of other authors when quoting them directly.
- Abbreviations should be used sparingly and correctly. Again the Oxford English Dictionary should be taken as the authority.
- When using numbers in the text, it is conventional to write the numbers zero to nine in words, and numbers of 10 and above in Arabic numerals, e.g. “The sample comprised three unequal groups of managers, of 29, 37 and 112 respondents respectively”. If a sentence begins with a number, however small, always write it in words.

## **THE RESEARCH PAPER**

As an alternative to the conventional research report, you are allowed to present your research in the form of a publishable research paper. This approach aims to encourage and facilitate the publication of journal articles by the faculty. If you choose this option you should present your research paper in the format prescribed for a journal article contribution by a recognised refereed journal in the subject field. Your supervisor, in consultation with the Programme Manager: research, has to agree in advance to your choice of journal.

If you want to write a research paper, you need to indicate this as early as your research proposal. The 'Instruction to Authors/ Contributors' of your chosen journal should be attached to the proposal. The paper should preferably not exceed 6 000 words. To meet the requirements of the Master of Management degree, this research paper will need to be supplemented by all or some of the following sections, as specified by your research supervisor:

### **Detailed Literature Review**

Depending on the nature of the research, the theory base that needs to be considered may be far broader than what can be discussed in the paper itself.

### **Detailed Research Methodology**

The limited space available in the paper is often insufficient to do justice to the research design employed in the research. It may be necessary to describe the actual methodology employed in more detail.

### **Details of Data Analysis**

The 'results' chapter in a research report is usually confined to key results, with further details of the results and analysis contained in Appendices. When the research is presented in the more constrained research paper format it is almost always necessary to present additional details of results and analyses in Appendices.

#### **NOTE:**

The nature of the research, the methods employed and the analysis of the results are the same for a research paper as for a conventional research report. Only the presentation format is different. A research paper demands far more polished writing skills than a research report.

# WRITING THE RESEARCH REPORT

Writing up the research report is one of the most important elements of the entire project. This is where you communicate your research. Writing the research needs to be carefully planned and structured.

## Academic style

The academic style is rigorous but necessarily dull. Academic writing is meant to persuade (with evidence), so the more appealing your writing, the better. No slang is used and jargon is defined and used sparingly. Plagiarism is not accepted. Academic writing is referenced.

You may find it useful to think about writing up your research as a process with three phases:

## Pre-writing Phase

In this phase, early in the project, you think what you want to write, your argument, what evidence and how you will structure the whole Research Report and each chapter.

## Writing Phase

In the writing phase, you identify your audience and write freely knowing that this is just a draft. You might want to break down your report into sections so that the whole task doesn't become too daunting.

## Post-writing Phase

In the post-writing phase, you edit for specific reasons. This helps you to focus on all elements of producing the document. For example:

- Edit for content to make sure that you have said everything you want to say.
- Edit for style to make sure that your writing is clear, concise and readable and that you have an academic style.
- Edit for formatting: Do you have headings, are the headings consistent, have you used grammar and punctuation correctly, etc.
- Edit for referencing: Are all the references in the text also listed at the back? Are they correct and consistent?
- (Give your draft to a friend/colleague to read. Ask them what your argument is to check if it is being communicated clearly.)

## Editing for style

The aim of good writing is to communicate effectively with your chosen reader. Standards of style and usage are changing all the time, and all these notes can do is indicate the preferences of the audience for your research report: your examiners.

Your report must be written in SA or UK English and follow an appropriate formal literary style. This means you need to follow British (not American) conventions of spelling and punctuation.

Words ending in '—ize' in US English are spelled '—ise' in UK English.

Use whatever facilities (spell-check, grammar-check) your computer has. (Many computers have US dictionaries, and they will probably not be loaded with your specialist vocabulary, so they need to be checked. You can usually use a 'learn' instruction to teach computers new words or spellings).

Write simply, directly and actively. Keep your sentences short and avoid complicated constructions and language. You are being examined on what you have discovered, how intelligently you have analysed it, and how well you can communicate your ideas.

Make sure that your sentences have agreement. That is:

- verb and subject must agree in number and person
- pronouns must agree with their antecedents in number, person and gender. (Many languages deal with the "he/she" distinction differently from English.)

Research is described in the past tense: it is an account of what you DID. Only move out of the past tense when you are discussing current situations (present = is) or future plans (future = will).

Reported speech (without quote marks) also goes into the past tense. In both reported and direct (in quotes) speech, you must show by [ ] if you are changing a word the speaker used, and by (...) if you are leaving words out. Be consistent about how you use single(") or double("") quote marks.

Be sure you understand how to use punctuation. Be especially careful with commas (most people use too many); apostrophes (for possession or to show that a letter is being left out) and capital letters (at the start of a sentence and for proper names or titles only).

When you use pairs of marks — commas, parentheses, dashes or quote marks — don't forget the second one.

Avoid a monotonous vocabulary — don't keep repeating a particular word or phrase simply because you like it. Avoid especially the repeated use of empty words like 'nice', 'good', 'a lot' and 'some' which are so vague and over-used as to have lost almost all meaning. A Thesaurus will provide alternatives.

Although these are some pointers on style, there are many more, too many to list here. Consult one of the books listed at the end of this section, or look on the language shelves of a good library or bookshop for more help. Don't neglect second-hand bookshops, which sell useful volumes much more cheaply.

## Some comments from previous Research Reports:

- You cannot 'interview' an organisation or a department. 'Interview' refers to conversations with living people — say who you spoke to, or say you 'carried out interviews in' the department.
- In academic writing, it is still not acceptable to use the possessive 's with an inanimate object like a department. The grammatical argument is that non-living entities cannot own anything. So don't say 'the department's size'; prefer 'the size of the department'. This no longer applies in business communication. As we said, academic writing is more old-fashioned.
- To show contrast, say 'different from'. 'Different to' is less common, although modern dictionaries now say it is acceptable. 'Different than' is an Americanism.
- Alternative means [a choice between] two (not three, four or more) mutually exclusive things. For more than two, use 'choices' or 'options'.
- Please use a spell check!!

## Quick Writing Checklist

1. Does the introduction set out a clear plan for the piece of writing?
2. Is the information complete?
3. Is every assertion (opinion) supported?
4. Is there a clear argument?
5. Is the information relevant?
6. Are accurate references provided where needed?
7. Are there complete conclusions, clearly derived from the argument?
8. Is there a writer's voice?
9. Does the writing flow smoothly
10. Is the writing enjoyable and interesting?
11. Is the language precise?
12. Is vocabulary repetitive?
13. Is academic jargon used accurately and selectively?
14. Have grammatical conventions been respected?
15. Has spelling been checked and corrected?
16. Is the writing set out in a clear, neat format?
17. Have academic conventions been adhered to?

If you feel that your writing needs improvement, **The Writing Centre**, on West Campus provides help in this area. The telephone number is 011-717-4125.

## Some useful reading on writing style

A **dictionary**. Check the bookshop shelves and buy one which you find easy and friendly to use. If English is your second language, look for a dictionary which gives examples of how words are used. Check how well it performs on words associated with your studies. And don't buy a second-hand dictionary more than five years old; usage is changing so fast that it may not be helpful on some points.

A **thesaurus**. This contains groups of synonyms (words with similar meanings) and antonyms (opposites). If English is your second language, go for depth rather than breadth — choose a book which holds fewer words but explains the shades of difference between their meanings. The Cassell Thesaurus is one such.

A **grammar / usage guide**. The most widely available in South Africa is "Wordpower" by Adey, Orr and Swemmer (Paperbooks). It is reliable and widely recommended. More comprehensive, but rather intimidating, are classics like Eric Partridge's "Usage and Abusage" and Fowler's "Modern English Usage." (Don't be deceived by the 'modern' — it dates from the 1920s and before!) Excellent, modern, imported books if you can find them, are "The Sunday Times Wordpower Guide" and "The Bloomsbury Good Word Guide."

William Zinsser's "On Writing Well" (Harper & Row) gives excellent advice on writing style for the social sciences. And if you find it hard to get started, despair easily of your writing, and lack confidence, Anne Lamott's "Bird by Bird" (New York. Anchor/Doubleday, 1994) — although designed for writers of creative fiction — contains practical advice and a great deal of hope and comfort.

There are also a number of useful online writing resources. Ask your supervisor or degree convenor to recommend some.

## RESEARCH REPORT SPECIFICATIONS

You should aim for a legible and relatively simple presentation to 'frame' your work and ideas. Choose a simple font that is easy to read. Avoid fancy boxes, elaborate "bullets" and meaningless graphics.

The following requirements are mandatory. You must:

- Produce a report between 35 000 and 45 000 words long (about 120 pages).
- Select a font size of at least 12 points (10 pitch).
- Use 1,5 line spacing.
- Set the top, right and bottom margins of each page to 30mm (1,2 inches). Set the left margin to 40 mm (1,6 inches): broader, to allow for binding.
- Print the research report on a laser printer or equivalent quality. (Most dot matrix printers will not produce the required quality).
- Print the research report on A4 size (210 x 297mm) good quality white paper.

### Binding

You will need **four** bound copies. You may hand in the reports in temporary binding until the marking process has been completed. Following confirmation of your results you will be required to bind one copy in **Burgundy Red** or **Oxford Red** hard cover.

The title of the research report and your initials and surname must appear on the front cover and the spine in **gold lettering**.

You may get your Report bound anywhere as long as you adhere to the above specifications. Binding takes at least a week, longer in busy periods. P&DM students usually use:

Brixton Bookbinders  
53 Indra Street  
Mayfair West  
Tel and Fax : (011) 837-3979

Haste Bookbinders  
33 Buxton Street  
Doornfontein  
Tel: (011) 402-6472/3.

Ronald Zeal, Zeal Book Binders  
P.O. Box 869  
Northlands  
2116, Johannesburg  
(011) 487-1735  
(Also open on Sundays)

### Handing in the Research Report

The research report must be handed to the Faculty Office, NOT to your supervisor or anyone else. The Faculty Office requires **three** temporary bound copies of the research report (one for each examiner).

In addition to this, you are required to submit two copies each of the title page and abstract, fees clearance and student card to the Faculty Office. **NB: Only on receipt of the above documentation will your research report be sent for marking.** Any variances from this will be at the discretion of the Faculty Office.

After the approval of the final mark by the Higher Degrees Committee you **MUST** further provide the Faculty Office with a hardbound copy in either Burgundy or Oxford red for the library as well as an unbound copy for archives.

You will also be required to submit a copy of your research report on a computer disk. The disk, as well as the final bound copy for the library and the unbound copy for Archives, should contain the FINAL text of any REVISED report in a single file, plus an indication of the computer package used and version (e.g. Word 2002), including all appendices, tables and figures (on a DOS-formatted disk or disks).

The research report must be handed to the Faculty Office, NOT to your supervisor or anyone else. The Faculty Office requires **four** temporary **bound copies** of the research report (one for each examiner and one for the library) and **one unbound copy** (for the archives). In addition, you are required to hand in **a disk copy** of the research report, including all appendices, tables and figures (on a DOS-formatted disk or disks).

Please label each disk with:

- your initials and surname;
- the title of the research report;
- the number of the disk and total number of disks (e.g. Disk 1 of 4);
- the format of the files on the disk (e.g. Microsoft Word Ver. 6.0);
- a list of the files on each disk.

**You also need to submit:**

- Two copies of the title page
- Two copies of the abstract
- Fees Clearance
- Library clearance
- Student card
- Overall supervision evaluation form

And you need to have **signed and dated** all five copies submitted.

The Faculty Office will require a few other formalities and **forms to be completed** (e.g. library clearance) when you hand in the research report. Please check these specific details with Faculty Office before handing in your report. (Out-of-town students: please note these requirements well in advance).

Also, please adhere strictly to the prescribed hand-in dates. If you are not able to meet the hand-in date you will need to apply to the Faculty Office for a research extension and, if this is accepted by the Postgraduate Degrees Committee, you will be given a three month extension for which you will be charged a fee. Any extensions given beyond the three months will be charged for at full fees for the Research Report. It is in the interests of your pocket and your sanity to finish on time.

# ASSESSMENT

The following criteria are used by examiners to assess research reports:

## **Structure of the Research Report:**

- Is it coherent?
- Do the paragraphs/chapters flow into one another?
- Are there any repetitions?
- Is the language clear?
- Is the referencing correct, consistent and in the required format?

## **Nature of research:**

- Is it clear what type of research it is?
- Is the type of research adequately explained and justified?

## **Scope of Research:**

- Is the research focused and relevant?
- Is the literature reviewed relevant?
- Is the literature linked to the research?
- Does the literature support the research?
- Does the research contribute to the literature?

## **Area of research:**

- Is the research clearly defined and analysed?
- Does the research lead to insights or applied conclusions?

## **Level of research:**

- Is the research at the level required of a Masters degree?

## **Methodology:**

- Is the methodology appropriate?
- Is the methodology well understood and explained?
- Is the chosen methodology applied adequately?
- Does the methodology allow adequate analysis?

## **Overall evaluation:**

- Was the research carefully thought out?
- Was adequate research undertaken?
- Was data adequately analysed?
- Were terms defined?
- Were conclusions made without evidence?

Generally, examiners are looking to see if you have mastered the issues you are researching and if you have presented your argument with the relevant academic debates clearly.

## Marking Scheme for MM Research Reports

### 1.1.33.1 A (75+)

The Report is a coherent body of work structured around a do-able relevant research question/hypothesis. The work shows insight and creative thought. The author synthesises different theories and conceptual models drawn from a relevant body of literature and develops an argument. He/she outlines an appropriate research methodology and integrates this into the study. Presents the data in an effective manner, unpacks findings and links this to the literature reviewed. Attempts to resolve problems, make decisions and recommendations in a defensible way. Moves beyond description to insight. Has presented the Report with in a clear writing style with the correct referencing style, formatting. Originality of thought and depth of critical insight are what distinguishes an A from a B.

### 1.1.33.2 B (70-74)

The Report is logically structured, well written and presented. The argument research findings and analysis are comprehensively developed. The methodology is appropriate and clearly understood. Theoretical concepts are applied appropriately. Originality of thought and depth of critical insight are what distinguishes an A from a B.

### 1.1.33.3 C (60-69)

The research is fairly well conceptualised. The student shows a fair understanding of the relevant body of literature but the application of the knowledge is not fully developed. The research methodology is adequate and relevant but not insightful. The scope and limitations of the research are not fully recognised. The research data not fully exploited. The argument displays a certain logic and is properly presented.

### 1.1.33.4 D (50-59)

As for 'C' but with gaps or inconsistencies. For example, trivial issues discussed alongside important ones or student has made use of theories which don't seem to apply or misused theories or research conclusions not well justified and contradictory.

### 1.1.33.5 FAIL (below 50%)

Literature review inappropriate and weak. Presentation of results poor. Comprehension not demonstrated. For example, contradictions, information incorrectly represented and explained. Critical analysis weak. Information poorly represented with incorrect referencing and formatting. Research not adequately conceptualised OR research methods inadequate/inappropriate OR research inadequately conducted OR research is not coherent and logical, irrelevant points are included and given as much weight as relevant ones OR required sections of the Report may be missing.

## A NOTE ON COPYRIGHT

You should be aware of the University Regulations (G.29 and G.30) relating to the copyright on your research report or paper. These say:

### **1.1.33.6 G.29 Copyright**

While copyright in his/her thesis, dissertation or other work remains in the candidate, the University shall have the right to make a reproduction of it or parts of it for a person or institution requiring it for study and research; provided that not more than one copy is supplied to that person or institution; and to distribute abstracts or summaries of it for publication in indexing and bibliographic periodicals considered by the University to be appropriate.

This means that you keep copyright on your own research report or research paper but that the University has the right to distribute single copies for research purposes and produce summaries for indexing and archival purposes.

### **1.1.33.6.1 G.30 Acknowledgement of award of degree if material published subsequently**

A candidate upon whom a higher degree has been conferred by the University and who subsequently publishes or republishes his thesis, dissertation or other work, in whole or in part, shall indicate on the title page or in the preface or, if this is not appropriate, in a footnote, that such thesis, dissertation or other work has been approved for that degree by the University.

This means that once you have your degree you can re-publish your work as a book or article, but that you must indicate when you publish that the work was undertaken as part of your studies for a specified course at this University.