

Effective PhD supervision: mentorship and coaching

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Effective PhD Supervision

EFFECTIVE PhD SUPERVISION MENTORSHIP AND COACHING

Ahmed A. Wadee, Moyra Keane, Ton Dietz & Driekie Hay

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FOREWORD

I am very pleased to present this second edition of the South Africa-Netherlands Research Programme on Alternatives in Development (SANPAD) Supervision Workbook.

The Workbook is yet another contribution by SANPAD towards improving the quality of supervision of doctoral students in South Africa. The Department of Higher Education and Training is particularly encouraged by these efforts, as they continue to enhance the overall quality of our PhD graduates and future academics. PhD qualifications are generally considered to be the first real entry points into the rigorous world of research. As a result, the focus on improving the academic experience of students at this level through improved supervision and mentoring will go a long way towards increasing the overall numbers of PhD graduates at our institutions.

It has become clear that although the number of students enrolling for PhD studies in South Africa has increased over the years, a large proportion of these students do not complete their studies. The reasons for this are many, among them the relationships between supervisors and their students and the overall quality of supervision. The difficulties often stem from the fact that not all supervisors have been properly trained for supervision duties. The mistake that is often made in higher education institutions across the globe is to assume that every academic, by virtue of his or her experience in teaching or research, knows what is required to supervise postgraduate students. Studies show that this is not usually the case and, in fact, academics need proper training and support if they are to effectively carry out their supervision responsibilities. This Workbook will provide a useful guide for both supervisors and PhD candidates on how to structure their working relationships into better interaction and supervision experiences.

This book sets out to serve as a challenge for improving PhD supervision, mentoring and coaching both in South Africa and in the Netherlands. It can be utilised as a training manual for supervisors in both countries. The book is also easy to use, as it provides practical examples and scenarios. Moreover, it provides strategies on how to deal with some of the challenges commonly experienced by both supervisors and candidates during PhD supervision, mentoring and coaching. For these reasons, I offer my support for this publication.

Finally, I would like to thank the individual authors of each section of this book for their hard work in putting together such an important text. My sincere thanks also go to the people and institutions that have provided support for the production of this book. I really hope that this resource will stimulate and inform. In this way it will contribute positively to the improvement of our postgraduate students and research system.

Milekafe

MS M. METCALFE Director General: Higher Education and Training

Mary Metcalfe, former Gauteng education minister and head of education at the University of the Witwatersrand was appointed director general in the Department of Higher Education and Training in 2009. Before joining Wits in 2005, Metcalfe served as the Gauteng minister of agriculture and land affairs and as deputy speaker in the legislature. She was Gauteng's first education minister between 1994 and 1999, earning respect for putting the province ahead of others in terms of policy implementation.

ACKNOWLEDGMENTS

The contributions of various individuals and institutions throughout South Africa, who have shared their experiences and practices, and the students and supervisors and many individuals, who shared their thoughts and ideas and gave their input freely, are gratefully acknowledged.

In particular, SANPAD wishes to acknowledge the PhD candidates, their supervisors and the facilitators of the Research Capacity programme (RCI), all of whom provided valuable insights and contributions in reworking the first edition of this workbook. Furthermore, it is with sincere gratitude that we recognise the contributions of the following persons:

- The authors of this workbook, namely, Prof Ahmed Wadee, Dr Moyra Keane, Prof Driekie Hay and Prof Ton Dietz
- Dr Anshu Padayachee who is responsible for curriculum development and who contributed to the Introduction (Chapter 1) by placing this workbook in perspective
- The Director General for Higher Education and Training, Ms Mary Metcalfe, for writing the foreword to this workbook
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1

INTRODUCTION

1.1 Background to this Workbook

SANPAD (South Africa-Netherlands Research Programme on Alternatives in Development) has had a proud history of over ten years in providing a platform for promoting a research culture in South Africa in partnership with the Netherlands. SANPAD's flagship programme has been its research capacity building programme for pre-doctoral candidates. Two hundred and thirty candidates were selected for the RCI programme during the period of 2002-2008; all candidates registered for their PhD degrees. Of these, 125 have graduated from their respective universities, and the remaining 105 candidates who registered between 2005 and 2008 are expected to complete their PhDs and graduate by the end of 2010.

Following the first edition, the approaches to supervision and mentoring have evolved over time (with some new facilitators), but the essence of running the workshops from which this publication emanates has essentially remained the same. However, in this second edition, as implied by the revised title, we have included coaching as an important means of promoting graduate student success. This expands the coverage and includes numerous improvements to the original material. The first edition of this workbook filled an obvious gap at the time and met with gratifying reception from the academic community both in the Netherlands and Southern Africa, but there were areas that required further expansion and new information needed to be included. The PhD candidates, their supervisors and the facilitators in the Research Capacity programme (RCI) were a valuable source of information that motivated the authors to revise the first edition. Hence, the second addition was born. The changes in the second edition respond to the experiences of both the students and the facilitators in the SANPAD pre-doctoral programme and the input that we received from the broader academic community in South Africa over the last five years. More importantly, the book engages readers in dialogue and active reflection on the strategies of effective supervision of PhDs. Accessibly written, it encourages supervisors to reflect on and enhance their research supervision practice with a diversity of students on a variety of research projects. There is a special focus on research skills development and on supporting students through and beyond the examination process.

High quality postgraduate education is of central importance to the creation of the ever more highly skilled workforce that is necessary if our country and continent is to flourish in an increasingly complex and competitive world. It also brings great benefit to individuals and, through them, to society as a whole. Over the past decade we have witnessed some really quite dramatic and challenging changes in the shape, nature and volume of education at this level; changes that not only support our immediate needs for the workforce and knowledge-based economy but also reflect today's remarkable and rapidly advancing technology. Of course, such changes don't come for free and I am only too well aware of the various pressures to which postgraduate education is subject, pressures that in turn impact upon staff and students alike. It is against this backdrop that we present this comprehensive workbook on supervision and mentorship.

The first edition was immensely successful, as is so evident from the positive feedback that we received. The book has been most notably recommended as reading for many postgraduate programmes on the African Continent and so has had a much wider remit. I am convinced that this new edition will be even more successful than the first, successful with both postgraduate students and their supervisors.

'If only this book had been available when I was a PhD student'

1.2 South African Perspectives on the PhD

Since 1994, South African higher education has experienced a major transformation - particularly in redressing the educational backlogs and needs of previously disadvantaged students. A lot has been achieved in widening access for black students at the undergraduate level, specifically. However, with regard to postgraduate students and research output, the system is not yet making the progress desired, since insufficient numbers of black and women postgraduate students obtain doctoral degrees. Subsequently, institutions find it hard to reach staff equity targets and not enough black supervisors exist to serve as role models for black students. The Education White Paper 3 sounds the alert about the 'insufficient research capacity in higher education that is amongst others poorly coordinated and inadequately linked to postgraduate studies.'1 This paper has also prioritised the access of black and women students to master's, doctoral and postdoctoral programmes. These race and gender imbalances are found in the demographic composition of researchers in higher education, research councils and private-sector research establishments.

The participation and completion rates of black postgraduate students are crucial in order to deal with employment equity targets and the creation of a new generation of scholars/academics in South Africa. Although progress has been made in terms of the staff compilation of higher education institutions and black academics now constitute approximately 30% of the higher education workforce, they still produce less than 10% of all peer-reviewed articles in the latter part of the previous decade. In terms of equity, black students constitute about 30% of all master's and doctoral enrolments in higher education. However, they only constitute about 20% of the postgraduate enrolments at the historically white universities. It thus seems that in the case of research, which includes master's and doctoral degrees, it has been more difficult to break down the apartheid legacy than it has in terms of student access, research funding and staffing.²

¹ The Education White Paper 3 (DoE 1997)

² Bawa & Mouton (2002): 320, 328

The training of supervisors and promoters is becoming increasingly important as is the need to change dated ways of providing supervision. We need to consider how cultures meet, what kind of interactions should take place, and how applicable and acceptable the methods are for postgraduate students. The realities of a complex supervisory relationship, where colonial/West and African, the scholastically advantaged and disadvantaged, and a number of different cultures and languages interact, often with conflicting and deviating political and worldviews coming together, have not yet been researched sufficiently within the new higher education dispensation.

1.2.1 Complexities in postgraduate supervision

The predominant assumptions and values that have characterised postgraduate supervisory practices in the South African higher education system are mainly derived from aspects of European culture. However, higher education is a narrow culture that rewards specific ways of knowing and instinctively discounts other ways of knowing (nonverbal, empathetic, visual, symbolic or nuanced communication are often not valued, for example). Accepted postgraduate supervisory practices usually conform to the traditional ways of knowledge creation, research paradigms and worldviews, and utilise one specific methodology to oversee postgraduate research. What has thus emerged in the South African higher education system is a lack of conscious cultural identity among postgraduate students in higher education, since in most cases a single common norm is advocated and the culture-conscious postgraduate student is viewed as frivolous.

1.2.2 Supervisory challenges in the Southern African context

An array of challenges still face postgraduate supervision in the South African context, amongst them, inadequate academic literacy and writing skills, power relations, and inadequate preparation in research methodology.

1.2.2.1 Academic literacy skills

A great area of concern is the inadequate academic literacy levels of postgraduate students whose mother tongue is not English, as it is expected from them to write and articulate their ideas at the level at which they are working and thinking. Working in another language clearly hinders this. Often students need to translate what they hear and read. This slows down postgraduate students' thinking and expression, impeding thought processes.

1.2.3 Power relations in postgraduate supervision

Power relations between supervisors and students usually emanate from the authority position of the supervisor, exacerbated in the case of non-traditional postgraduate students who work in English as a second (third, fourth or fifth) language. In a multi-cultural supervisory relationship, it is imperative to reflect on whether pedagogical approaches to supervision and research, and the suggested values and outcomes underpinning these, are themselves culture- and valuefree or a product of cultural ideologies. In the South African context non-traditional postgraduate students and those representing first generation postgraduate students are expected to fit into the culture and practices of historically advantaged (predominantly white) higher education institutions and are expected to assimilate into these institutions' beliefs and practices. This needs to be done with great sensitivity and to be built on a relationship of trust and respect. One way of achieving this, is to draw on Vygotsky's work on mediated learning experiences.3

Vygotsky, a founding theorist on socio-cultural learning issues, reminds us that all uniquely human or higher mental functions are transformed social relationships which emerge and are shaped in the course of joint activities with others. The crux of the matter is that what people come to know, that is, how they learn to learn, to think and to act in particular contexts, is constituted in a relationship between their existing cognitive schemes, knowledge, skills and dispositions, the functional demands of the activities they participate in, and the forms of mediation they are afforded in such activities.⁴ The implication is that, regardless of how much potential postgraduate students have, if they do not have opportunities to participate in activities that

³ Vygotsky (1978)

⁴ Bradbury (1993)

develop specialised forms of knowledge and functioning and/or are not afforded sufficient opportunities of mediation by others experienced in those activities, they are unlikely to develop such forms of functioning. Consequently, the notion of mediated postgraduate learning experiences and how they should be brought into supervisory practices is becoming increasingly important for transforming the typical South African postgraduate context. This should be viewed against the fact that the gap in many of our postgraduate students' educational backgrounds and in their limited research training at undergraduate and honours degree levels needs to be closed by helping students along their way, in other words, closing the gap between what is known and what is to be known.

The following guidelines, drawing on the actual experiences and observations of exemplary supervisory practices within South African universities, should be considered when attempting to improve the practice of supervision:

- Applying appropriate selection measurements which could include instruments that will assess the student's level of readiness to engage in rigorous postgraduate work.
- Considering the training of supervisors as a serious matter, since underprepared supervisors can hamper the quality of postgraduate work, retention and success rates. Training should include aspects such as technical, personal, legal, ethical, administrative and professional aspects of supervision.
- In addition, an induction programme for new supervisors in the field should be designed so that they gradually learn to supervise, ideally under a mentor, starting initially as a co-supervisor.
- Creating reporting opportunities for new supervisors in the field, so that they can receive constructive feedback on emerging problems and take corrective action before serious problems surface.
- Offering structured and regular opportunities for students to provide feedback on the quality and effectiveness of supervisors and on their experiences of the overall supervisory process. Such a practice will ensure that students at risk can be identified early so that necessary and timely interventions can be brought to bear.
- Ensuring that universities, faculties and departments have an

updateable Handbook for Supervision which outlines the code of conduct for all involved. This will ensure that every supervisor and student is aware of and familiar with the often complex administrative regulations, requirements and deadlines that accompany this process.

- Holding supervisors accountable for the progress of supervision by requiring regular reports on each student. A 'logbook' is often very helpful, as it keeps a record of all the meetings and interactions between student and supervisor as well as what should be done in terms of follow-up action and preparations for the next meeting.
- Looking carefully at the workload of supervisors and preventing a novice supervisor from supervising more than one or two students.
- Getting to know the postgraduate student early on. Although this is hard for cases of supervision at a distance, for those students who are nearby and on-campus, it is important to get to know the students.
- Building the confidence of the postgraduate student: students should be encouraged to put ideas on paper. This will help the supervisor to judge whether the student understands the nature of the doctorate and will provide opportunities for positive feedback.
- Dealing effectively with pressures in the supervisory relationship: there are the pressures of the developing relationship and pressures to get the student completed in the designated timeframe. Students need to understand that they must work hard early on and have regular meetings. At the end of a meeting, the next meeting needs to be scheduled.
- Keeping to timeframes. Supervisors have a responsibility to get students to stick to timelines. Establishing this habit early on in candidacy is crucial.
- Monitoring student focus. The supervisor needs to keep one step ahead of the student to keep the student from being sidetracked. If the student is going off in different directions, pull them back into focus.
- Encouraging publications from the beginning. Supervisors should encourage students to publish, although this will depend on the student and the topic. If a student is able to be published in a good journal, this will help the examination. But getting published needs to be balanced with getting the thesis written. Writing the thesis should be the first priority.

2

GUIDELINES FOR SUPERVISORS

2.1 Introduction

It is well recognised that despite the fact that support for postgraduate students at various levels is available in South Africa, a large and unacceptable proportion of such postgraduate students do not complete their studies. Some of the reasons for this have been ascribed to:

- A lack of understanding by the students and a failure to communicate by the institution as to the standard of work required for a particular degree
- Allocation by the institutions of supervisors who are generally not interested in the topic but are forced to supervise as part of their academic commitments
- Difficulties in conceptualising the programme the student is in and a lack of clear guides generally replaced by vague requirements
- Differences between supervisors and their approaches to supervision
- Lack of supervisory policy or standards at the departmental, faculty or institutional level
- A general lack of training for supervisors institutions do not have a formal or informal supervisor training programme
- Time pressures and interruptions placed on supervisors by their institutions, which prevent optimal interaction with postgraduate students
- Poor record-keeping concerning supervision supervisors do not formalise their interactions with students

- Unclear or the absence of any agreements between supervisors and students and the institution.

Other contributing factors have been identified as poor planning and management (both student and supervisor), vague and unfocused problem formulations, the collection of irrelevant data and inappropriate data analysis. Methodological difficulties may emanate from inadequate knowledge of research methodologies, lack of formal training in research and naive research skills. The inability to formulate scientific arguments, to provide a logical structure, to synthesize and to formulate research problems, and to identify the essence in information and data also influence completion rates. In all of these cases it is tempting to point fingers at students, but the responsibility and the provision of training at all levels must be taken up by the institution.

It is thus important for the supervisor to be acutely aware of factors that may impact on postgraduate studies and supervision. Apart from acquainting oneself with the issues in supervision, it is imperative that supervisors are familiar with the requirements for a PhD degree. Entry requirements, mode of study, academic and disciplinespecific demands, holding full or part time jobs, and having family responsibilities are all demanding on the doctoral student. In addition, personal circumstances, integration into a department, and entering a new environment and institutional culture could lead to feelings of loneliness and isolation.

The primary expectation of supervisors by their institutions is familiarisation with all administrative and procedural requirements from registration to final acceptance of the thesis. Each university has its own rules and codes of practice, and supervisors are expected to be familiar with the procedures of their institutions. What follows here are generic suggestions on the operational issues relating to these procedures.

2.2 Procedures and Practices for the Admission and Approval of PhD Degrees

An array of procedures and practices exist and are in place in universities in South African and abroad for the admission and approval of PhD degrees. The process requires approval by a formalised ethics, postgraduate and/or university graduate studies committee with specific individuals indentified to oversee the quality and scholarship of the proposed research project. The kind of structures and committees overseeing this process may differ from university to university, but in essence their task is to ensure the university's academic integrity and the integrity of the research publications emanating from the research and the development of the individual postgraduate student. Regardless of the institution, it is the responsibility of the department/ postgraduate coordinator to ensure that the highest practice is maintained.

2.2.1 Admission requirements for a PhD degree

In general the PhD by research is perceived as the most scholarly/ authentic PhD leading to an academic career. However, in keeping with international trends, universities in South Africa are moving towards awarding of the degree based on publications in peer-reviewed journals within a specified time period.

Typically the following admission requirements are applicable to prospective candidates wishing to register for a PhD degree:

- i. a recognised master's degree, recognised four-year bachelor's degree, plus at least one year's registration for an approved master's degree (in some instances)
- ii. a recognised three-year bachelor's degree plus at least two years' registration for an approved master's degree with submissions of scholarly work in the research area in peer-reviewed journals
- iii. in special circumstances, at the discretion of the Senate, an approved bachelor's degree or qualification recognised by the Senate as equivalent, as per many universities that recognise prior learning in the area of the research work.

PhD candidates are generally expected to renew their registration annually. It is generally accepted that the duration for the completion of a PhD is five years.

2.2.2 The nature of obtaining a PhD

There are at least two perceptions of how a PhD may be obtained. The first is that the PhD is fundamentally a training in research (an apprenticeship) resulting in small steps forward in the understanding of the subject. The second is that the PhD is a period of scholastic and research endeavour culminating in a major contribution to the understanding of the discipline. The former perception is common in the natural sciences and the latter in the humanities. Clearly individual supervisors' perceptions will lie at different positions between these perceptions.

It has been normal in many countries for different institutions and different departments to offer a range of structures or routes through to a doctoral degree. Certain levels of attendance may be expected for taught courses, but performance in these courses is not generally assessed. Consideration is now being given to practices which will assess components including taught courses, publication records and work experience.

2.3 Some Considerations for Supervisors

A supervisor may take the following into consideration when assessing the quality of the thesis from the conceptual stage and reflect on the extent to which it adheres to the following criteria:

- Application of conventional research instruments in a new field of investigation
- Combining disparate concepts in new ways to investigate a conventional issue
- Creating different conceptual awareness of existing issues
- Designing and applying existing and new field instruments in a contemporary setting
- Extending the work of others by a variety of methodologies including the use of the original methodology and innovative thinking; identification of new and emerging issues worthy of investigation; and identification of gaps in the existing knowledge and viewing these as challenges

- Demonstration of evidence that the scope and possibilities of the topic were grasped academically
- The thesis provides a systematic account of the research problem, and in formulating specific research questions, demonstrates this
- A conceptual framework has been devised such that the ultimate conclusions can be drawn.

The list is not exhaustive nor does it intend to be prescriptive but may be used as a guide.

Amongst other characteristics used to define a 'good' thesis, evidence of the following is generally sought:

- Critical analysis and argument
- Confidence and a rigorous, self-critical approach
- A contribution to knowledge
- Originality, creativity and a degree of risk taking
- Comprehensiveness and scholarly approach
- Appropriate use of methodology with ample evidence of research validity and reliability; presentation and structure of data and thesis; and valid, logical reasoning for the conclusions drawn.

2.3.1 Objectivity and reliability

Objective and reliable (repeatable) findings are clearly more impressive than those which are vague or inconclusive. This poses difficulties in disciplines where the research utilises small sample sizes and is difficult to measure quantitatively. This non-quantitative work is generally recorded and presented in a valid acceptable format. This problem does not exist where the data is quantitative, and where the variables are relatively few and may be identified and measured – as is invariably the case in research in the natural sciences or in quantitative research methodologies.

2.3.2 The significance of a PhD

All universities require doctoral work to be 'significant'. However, what passes as 'significant' depends on the norms of the discipline. It can

be argued that knowledge is 'significant' for its own sake, irrespective of how useless it may appear to those in other disciplines. In the social sciences and some natural sciences, 'significance' is widely regarded as being of help to society in some way and a contribution to knowledge.

2.3.3 Assessing a PhD thesis

Universities appoint a committee of assessors, though its composition differs among institutions. This committee normally nominates three examiners with appropriate skills or expertise in the area in which the research is undertaken. In all instances external examiners are an essential component of the process. The examiners' reports are considered by the postgraduate committee and the institution for approval. Examiners are expected to recommend the awarding of the degree in accordance with regulations set by each university. (Please refer to the individual institution's guidelines for such information.)

2.4 Supervisory Practices

2.4.1 Traditional models of supervision

The focus of the traditional model of supervision is usually on the technical aspects of the research, the requirements of the discipline, content knowledge and on the production of a thesis, and can be done by means of:

- Supervision by a single supervisor where one candidate works with a single supervisor on one thesis/dissertation. This model seems to work well in most disciplines. The postgraduate student and supervisor get to know and trust each other; the student feels more comfortable and knows what is expected.
- Supervision by multiple supervisors where one candidate has two or more supervisors, one supervisor assumes the principle responsibility for supervising the candidate, but is assisted by colleagues with knowledge in other research fields. The group can have several postgraduate students under their supervision.

2.4.2 Workshop model for initiating student awareness

At the beginning of postgraduate study, students usually feel lost and confused. A workshop with other postgraduate students, presented by the academics involved, may provide guidance and training on issues such as the research proposal, academic writing skills, literature searches and reviews, research methodologies, and presentation styles and skills. In this way the postgraduate initiate is brought into the academic environment and may become familiar with various individuals offering specific support. Students would then be expected to have some of the basic skills and could progress to interacting with their supervisors more efficiently.

2.4.3 Directed team

In this model, one individual supervises a small group of students working on related topics or projects, using the same or similar methodology, in the supervisor's area of expertise. These individuals support each other in collecting material, formulating ideas and maintaining a specific schedule. The supervisor is an expert in the specific field and will be able to focus on the details of each student's research and work. A methodology group refers to students all using the same methodology, although they may be from different disciplines. The exchange of knowledge and experience in the methodology provides postgraduate students with an in-depth knowledge of the area. This model works well in the early stages of the postgraduate study process when students are still preparing their research proposals. Subsequently, aspects of each piece of work are carved out from the broad data collected and thereafter pursued on an individual basis with the supervisor.

2.4.4 Conference group

Conferences where postgraduate students may present their research findings and share their problems with each other are highly recommended. During such conferences supervisors and students are able to exchange ideas, learn from each other and network. This is particularly useful in national research projects which could develop into significant collaborative research undertakings.

2.5 The Supervisory Process and Tasks

In summary, supervision normally follows a process that includes statement(s) of purpose, research questions, study rationale, literature review, conceptual/theoretical framework, methodology/design, data analysis, validation, significance of the study, limitations of the study, work plan and references. These points are designed to engage the PhD candidate in his/her assessment by asking:

- a Does the question address a crucial deficiency (silence, contradictions, gap) within the knowledge base on the topic and hold together around that tightly defined topic, and does the question convey intellectual panache?
- b Does the question hold the potential for broader intellectual import beyond the specific locale of study?

The importance of the initial conceptualisation of the research cannot be stressed enough! Many research projects are set up for failure from the beginning, as not enough intellectual capacity, thought and expertise have been worked through in the initial planning phase. Obviously the styles/models used may differ and there is no one-size-fits-all supervisor. What is presented here are models which may be used independently or collectively vis-à-vis various supervisory opportunities.

2.5.1 Supervision goes beyond the thesis

Effective supervision goes beyond the thesis – it is attending to the broader intellectual development of a PhD candidate. Subsequently, it is important that a supervisor identifies conferences and seminars in which they can present jointly, that they travel together to serious research events, that they write together from an early stage, that they publish together and are always on the lookout for development opportunities that might advance the PhD student, that they inform the student of/direct the student towards the formation of doctoral peer support groups and encourage this formation, and that they identify resources that the student could tap into.

An effective supervisor will always attempt to facilitate connections and network the PhD student to the experts in the field within which he/ she has decided to work. Therefore, it is important for the supervisor to introduce the PhD candidate to the leading thinkers in his/her field as much as possible, and to send the best work of the PhD candidate to leading thinkers/scholars who are in the same area of research – thus consciously promoting the PhD student at all times.

2.5.2 Ensuring the PhD candidate becomes independent

Although initially a PhD student depends a lot on his/her supervisor, it is incumbent on the supervisor to attempt to move the student gradually towards greater independence and to know when the candidate is ready to assume more and more responsibility for directing their own work. This implies that the supervisor should avoid making the student a clone of him/herself, but should guide the student towards a topic, theory and method that reflects his/her own ingenuity, desire and voice. It is thus necessary to expose the student, amongst other things, to the work of the supervisor's opponents or to counter-theories on the work of the supervisor. Therefore, it is always a good idea to encourage the student to critique his/her own work. By doing so, the candidate will get used to the game of scholarly and critical ways of thinking – exactly the attributes one would like to develop within a PhD student.

2.5.3 The importance of effective feedback by the supervisor

It is desirable that the supervisor's feedback on written submissions should be direct, fast, clear, honest and consistent. Responsiveness to the students' work is therefore very important and should include:

- Standardisation of performance for academic delivery
- Feedback on the work's academic coherence
- Intellectual and relevant advice as to the production of the thesis.

It is suggested that the supervisor keep records of all decisions taken during a contact/feedback session in order to ensure follow-up/ continuity of the process until completion/submission (and beyond).

2.5.4 Reflecting on one's supervisory practice

Feedback on supervision goes some ways towards levelling the playing field in a very hierarchical relationship and assists the supervisor in adjusting his/her strategy to meet the needs of particular students. It furthermore provides the base data for critical scholarship on doctoral supervision. Hard as it may be, supervisors should learn and change their styles based on feedback from their students. It may not be what supervisors wish to hear, but there is a clear benefit and there are always opportunities to do better!

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3

GUIDELINES FOR MENTORS

3.1 Introduction

The supervision of postgraduate students generally follows institutional guidelines such that policies or procedures (sometimes confusing and contradictory) are in place to produce PhD graduates. From the students' perspective, on the other hand, the path leading to the doctorate is unclear and filled with all kinds of hurdles and uncertainties. Most importantly, and especially at the early stages of the degree, support at all levels is a necessity.

The concept of mentoring is a universal phenomenon and certainly not a new one! In almost all cases the challenges faced by post-graduate students appear to be dealt with more effectively, or rather with a greater sense of personal satisfaction, when such individuals have someone to rely on. During the course of their postgraduate studies, and particularly in the early stages, students are required to make an intellectual and, more importantly, an emotional leap from being Bachelor's and Master's students to becoming PhD candidates. In some instances, as with individuals with professional qualifications, the primary degree is earned without much exposure to formal instruction in research, ethics and knowledge of the requirements for proceeding towards a doctoral qualification. Primary degree supervision typically consists of structured courses, with the student enjoying direct instruction and regular contact with the team of lecturers concerned. PhD candidates are, however, expected to be more independent, self-sustaining, with little access to their supervisor and less structured than in their prior degree. For the PhD student, contact and feedback with supervisors depend very much on the rate of progress of the individual student concerned and on the commitment of the supervisor to the process.

The mental leap required by students who find themselves in a PhD programme is enormous, and for some the gap between prior qualifications and the doctorate may appear insurmountable. While in earlier endeavours in a student's academic career, advice and guidance (even at the proposal level) was relatively easy to obtain, this is not necessarily the case for PhD candidates. The expectations are that the student will now have greater insight into areas of research design, techniques and methodology. A familiar but unsettling comment from a supervisor, subtly or not so subtly suggesting that the new student should be in a position to find out for him/herself, is not always easy to accept. Often, however, students' expectations about asking the supervisor for 'advice' is hidden within an agenda of finding a quick solution to the proposal, project or ideas originally generated in the planning phases of the project. The student's perception is one where the supervisor seems to expect a switch will be turned on in the student's head such that the information required will be instantly at hand. Some students find this bewildering, confusing and frustrating, whilst others rise to the challenge. Often students look towards others to share their experiences and to seek emotional and intellectual support. In some cases, students arrive on campus without confirmation of residence, or any knowledge of the new environment or without even having a clear PhD topic in mind. The entire experience of undertaking doctoral training can therefore be very unsettling. So, to whom should the student turn to? Affirmation is a high priority! In this sense the student may have expectations of 'someone' being available to assist. That 'someone' is often targeted as the supervisor or course coordinator, and disillusionment based on expectations may set in very early.

The challenges for new doctoral students are not only to engage in academic work but to become familiar with the environment and to build new relationships. The engagement in the required academic commitments is an expectation of supervisors and faculty staff who often ignore or are unaware of the student not having resolved the initial appropriate social (non-academic) requirements. Thus, instead of focussing on the academic expectations of the PhD programme, the student is floundering and focussed on the former practical needs of facing a new environment. One possible negative aspect of this is the initial discordance between the two foci, which could be the seed for mistrust and unhappiness. This then becomes the focus of the student. The Faculty, with its academic and non-academic staff and more experienced students, should set its sights on assisting the new recruit in adapting to and managing life over the next few years in what may be perceived as an inhospitable environment.

In an ideal situation the supervisor is thought to be an outstanding and patient teacher, a superb researcher in his or her own right, and one who could, depending on the needs of the student, be a facilitator, mentor, and coach, including being the initial nucleus of knowledge around which postgraduate students would want to be. This could allow the student possibilities of growth limited only by the student's own ability and interests.

Not all individuals, be they staff members or senior students, have the makings of a mentor. Individuals who enjoy supporting others and sharing knowledge and time are far more suited to being mentors. The success of the programme rests crucially on the supportive nature and academic capacity of the prospective mentor.

Mentors, be they volunteers or faculty appointed to support new students, need some basic knowledge of the requirements for effective mentorship. To this end, workshops on mentoring at the faculty level are recommended to assist in identifying the requisites for mentoring. The remainder of this chapter, therefore, will focus on identifying some of these issues and will build on the previous publication based on experiences shared by many supervisors, students and staff members at various institutions within the Netherlands and South Africa. The contributions made by all are gratefully acknowledged (see acknowledgements).

3.2 Central Aspects of Mentoring

3.2.1 The functions of mentorship

The challenges faced by mentors, supervisors and host institutions include providing direction and motivation to achieve common objectives (ultimately, the PhD degree); assisting with research conception, design and methods; providing a perspective on the project and research environment; and, finally, starting the process of providing guidance, support and structure to the new doctoral student.

Central to the idea of mentoring is the development of a relationship such that the helping nature of the interaction is focussed on longerterm and broadly defined academic and social achievement. In this context both the mentor and student should gain intellectual, emotional and personal achievement from the experience. The starting point nevertheless is that the mentor initially comes from a background of having had previous exposure to various aspects of the programme and can share this experience with the new recruit. From this starting point, the interaction has huge potential to become a lifelong relationship. Indeed a common saying emanating from workshops has been 'once a mentor, always a mentor' and the implication, rather than being literal, is actually about the lifelong relationships built over the time the student spends with the mentor. This then develops into a closer relationship entering realms other than supervising a PhD! Whilst mentors may be the supervisors, there can be others who are interested individuals who share commonality of purpose with the student or colleague.

Some of the core functions of being a mentor include:

- A primary personal relationship between the mentor and student
- Provision of emotional, psychological and moral support
- Direct assistance and guidance with the student's career and professional development
- Role modelling to the point of 'showing the way'
- Development of trust, confidence and mutual respect between the student and mentor
- Reciprocity within the relationship in terms of derived benefits.

3.2.2 Who needs a mentor?

Everybody needs a mentor! This may not be applicable all of the time, but throughout life, and particularly in academic life, a mentor of some sort is necessary. Most, if not all, individuals have had role models but not all have had the privilege of a personal mentor who guided them through some maze, difficulty or challenge at some time. Indeed, almost everyone has had a mentor in some form or another during their lives. Their lives could be varied from little interaction to major involvement or to advice/support on anything minor or major.

Students thrive with the right mentor at their side. It does not stop there, though; mentors are sorely needed for individuals at all levels in the academic arena and in teaching. Even Deans and Vice-chancellors require a coach or mentor at some point in their careers. This is also true in the business world where leaders lend support to their juniors and gain insight from those who have undertaken similar tasks, shouldered the emotional burdens and have lessons to share with new entrants to the corporate enterprise.

The need for a mentor varies from individual to individual and from circumstance to circumstance, but decision making and looking towards the future is often clearer with support from those who have walked that road before. Most often it is not the advice but the shear knowledge of affirmation and back up (if required) that tips the balance to a favourable outcome for the individual seeking support.

3.2.3 The benefits of the mentoring process

There are a variety of benefits for both the mentor and the student. While mentors benefit from the experience on a more personal level, the student's benefits are more far-reaching.

Potential benefit to the student:

- Increased knowledge of the research programme, discipline, department and faculty/university culture
- Acquisition of skills and 'street-wise' knowledge that will be useful at a postgraduate level and in future careers

- Easier adjustment to the programme, department and environment
- Increased self-confidence and greater independence
- A channel for airing problems
- Desire to pursue an academic career and possibly mentoring future careers
- The difference between success and failure, if mentored early enough in the career.

Potential benefits to the mentor include and are not limited to:

- Tolerance and empathy with students, colleagues and associates
- An ability to identify problems that students/colleagues may not voice or even be aware of
- Life and leadership skills, interactive skills and limited coping mechanisms within the mentor's own sphere of events
- A sense of increased personal self-esteem based on the student's successes: 'parental/protégé pride'.

3.2.4 Requirements of mentorship

The more obvious requirements or expectations of the mentor in academia are to:

- Be aware of all the academic requirements for the programme
- Ensure the new student is made aware of all requirements, and possibilities for funding support and other opportunities
- Provide personal one-on-one support to the PG student
- Be aware of the needs of the student
- Have the capacity to refer the student to appropriate personnel for specialised academic or psycho-social support.

Other procedures common to both individuals and to the institution/ department should be put into place to make the mentoring process a functional and a rewarding experience. The institution can play an important role in the process by providing an enabling environment for mentor-student meetings and by supporting the mentor. Often, the mentor may not have the knowledge or be unable to provide adequate support. It is important that the mentor has access to a Faculty-appointed mentor coordinator or supervisor to turn to for such support. It is generally thought that mentorship should be voluntary and only those individuals wishing to take on the responsibility make the process successful. Reluctant mentors or those with expectations of perverse incentives such as payment or career advancement rarely make good mentors. Relationships between such mentors and students almost always break down, leaving all concerned disillusioned, and this may at times contribute to academic failure.

The stakeholders in this process are the institutions, departments, supervisor, mentor and the student. Some believe that a formal contract should exist to define each stakeholder's role and that it should be duly signed, etc. This however adds to the bureaucratic environment and is not necessarily conducive to the spirit of mentorship, viz., camaraderie, a helping hand and a socially interactive process.

3.2.5 Training of mentors

Training, providing funding resources and clarifying the role of the mentor are vital to the success of the mentoring process.

Training should include partnership responsibilities, knowledge of important campus sites such as offices of residence, financial aid, student administration, banks, restaurants, entertainment areas, safety and security measures, officers and offices, campus health offices, resources for guidance and counselling, sources for books (new and used), libraries and study areas. Experience with such training has demonstrated that, sadly, few students who had already been in the system for some time were aware of the range of available facilities.

An important component is the provision of skill training for mentors in order to be able to identify the warning signs of depression, anxiety and the need for psycho-social support. At no time should mentors take on the role of psychological counsellors but rather should refer the student to professionals appropriately trained for such support.

3.2.6 Stress: seeing the signs

Mentors, coordinators and supervisors must be able to identify signs of stress in a student. Stressed individuals in the course of their tenure

may exhibit variable patterns of behaviour. The cause of the stress may be academic, personal or social, and it is important to recognise stress regardless of the cause.

Stress may become apparent as behavioural, cognitive or physiological symptoms. Behavioural stress is seen as performance inefficiency, irritability, reduction in social sensitivity, pacing or hyperactive behaviour; cognitive disturbances are evidenced by anticipatory anxiety and fearful or worrisome thinking; while physiological symptoms may be seen in the form of mood swings, muscle tension, frequent headaches, gastrointestinal disturbances and cardiovascular symptoms (increased heart rate, blood pressure and respiration).

Obviously these are not all of the warning signs. That said, it is important to be on the lookout for any telltale signs. Once the situation has been identified, the student should be referred for appropriate treatment or counselling.

3.2.7 Reverse mentoring

In this situation, as is seen more and more with the advance of the electronic era, the student has greater exposure to and knowledge of a particular area. This has great potential as the roles can be reversed and the mentor may now find him/herself in the opposite position. The role reversal can be advantageous to both. Not only is the experience an educational one for the mentor, but one where the mentor's reversed role opens an avenue for observing him/herself as reflected by the student who, in the reversed role, is now the mentor. Negative aspects such as impatience and irritability or the positive sides of mentoring such as understanding and an ability to transfer knowledge come to the fore acutely. Consequently, both parties are brought centre stage in playing out each other's roles and can only benefit from the experience.

3.3 Organisational Mentorship Structures

Whereas the following sections provide suggestions on setting up formalised mentoring structures, experience has shown that the most successful mentoring relationships have been those where the informal situation came into effect due to various situations, be they social or academic interactions.

Faculties should be encouraged to consider specific strategies to create opportunities to provide quality mentoring for doctoral students. The professionalization of mentoring could include sponsorship for research programmes into mentoring, continual mentoring-education seminars and workshops, and the provision of specific training in the professional and ethical conduct of mentoring. Since most supervisors in the current era have not necessarily been exposed to formal mentoring programmes, it is important to highlight the need for strategic practice, ethical guidelines and operational procedures to formalise the structure and management of the mentoring programme. This could be beneficial and ensure the integrity of the process for both parties. The upshot of this would be to avoid exploitation (at all levels) of or by either individual. Factors that could be avoided are emotional interdependence and emotional/academic exploitation.

A strategy that could be harnessed by faculties is one whereby a culture of mentoring is created, nurtured and supported financially as well as being recognised as part of the academic process. In this facilitated mentor environment, staff mentoring students would be valued and rewarded. Some of the strategies that could be used to entrench mentoring in the university culture might be:

- Orientation of staff towards mentoring:
 - Mentoring workshops, supervision of mentors (hierarchy), defined mentor functions
- Rewards for mentoring:
 - Include mentoring in peer evaluations, awards and the assessments that contribute towards promotions
- Tailoring mentoring programmes to suit the needs of the students and staff/mentor
- Preparing the student to accept the role of mentee or protégé
- Continuously assessing the mentoring programme and adjusting with changing student/mentor needs.

Depending on the structures within departments and available human resources, mentors may be the supervisors themselves, heads of research units, divisions or departments, and senior students (who have been in the post-graduate programme for at least one year and who are familiar with the environment and post-graduate programme). The basic scenario is one where the supervisor also becomes the mentor because of the lack of personnel. A further step may be afforded when a senior student, who is also under the supervision of the project leader (in the same area of research as the student), is asked to mentor the new incumbent. In those cases where no such senior student is available and/or the supervisor is unable to mentor, a senior student in a similar or parallel project may be asked to mentor. Even though this approach may not necessarily be ideally conducive to the academic support of the student, it could potentially provide many of the benefits of mentoring.

In large units with many staff members, an individual (normally a senior member of staff) is asked to become a mentor coordinator. This individual could act as the head of the programme to which mentors in the department may refer. The coordinator's role is to ensure that mentors are trained and have the necessary knowledge and support to fulfil the duties of a mentor. The coordinator may also be the initiator of the programme and generally obtain donor or departmental funding for the mentor programme. Where such hierarchies do not exist, the supervisor/head of department usually takes on the responsibility of funding and providing the back-up for mentor consultation.

3.4 Setting up Mentoring Systems

Successful mentoring depends on:

- a Selecting appropriate mentors Selection of mentors should depend on the demonstration of sound academic performance in the past, an appropriate personality profile and temperament, leadership potential and a willingness to mentor. Empathy, patience and commitment to the programme should be uppermost.
- b Appointing a mentor coordinator The institution should provide an individual who would be the contact person to whom mentors may refer and be a source of

information for student and mentor needs. The coordinator also should provide an avenue for successful reporting and feedback processes. The role of the coordinator is also to ensure support being made available from outside sources such as counsellors and academic programmes, and to engage in fund raising for the programme.

c Training mentors

Once mentors have been selected, it is the institution's responsibility to provide training in stress management, listening skills, time management, resource availability, leadership skills and the art of social mentoring, as well as to orientate both mentors and students towards how to achieve rewarding partnerships. A certificate or some form of formal award at the end of the programme is desirable and will provide both staff and student mentors with a sense of accomplishment.

3.5 Requirements for Effective Mentoring

3.5.1 Linking students to mentors

This is not an easy task. Merely linking a senior student to a newly enrolled individual may be problematical. Likewise, because the two are in the same field of study or live in the same residence should not be the only reason for the partnership. Senior students should be asked to mentor. It is advisable, however, to allow new students a short independent settling-in time in which some (though superficial) liaisons may be made. The role of the mentor coordinator or supervisor in this instance is to be able to identify likely suitable mentors. Thereafter, the prospective mentor should be solicited or asked for his/her interest in mentoring, followed by suggesting the possibility of mentoring the new student. If affirmative, the individual should then be offered the opportunity to mentor and be introduced to the student. At that point, the social mentoring process should be allowed to take its course. In essence, mentoring is a two-way commitment between individuals based on honesty, realistic expectations, and an understanding and appreciation of each other.

3.5.2 Mentors fulfilling students' needs

From the perspective of the student, the mentor should:

- be committed to the mentoring process
- provide guidance and academic support
- promote effective time management (This implies knowledge of the student's academic schedule so as to be mindful of important lectures, seminars and journal clubs, etc.)
- encourage the student to be well prepared for relevant courses
- encourage self-study and preparation for research meetings
- assist in the setting up of study groups and self-support units with the student's peers
- furnish referrals to academic staff for specific academic problems and to relevant personnel for psycho-social support
- render limited personal counselling and have a positive attitude towards the process
- encourage participation in academic and non-academic matters
- be available to regularly review the student's progress in both academic and non-academic areas
- identify needs and provide avenues from which support may be obtained. These include offices of administration, financial aid, accommodation, libraries, study rooms, campus health, counsellors, banks and automatic teller machines, recreation and student societies
- encourage familiarisation with the department, the faculty and the university environment
- assist the student in adjusting and coping with the stresses of the environment
- facilitate an enabling environment
- actively address tutoring or supplemental instruction as required for the student's success (appropriate referral).

3.5.3 The student's commitment to the process

For the mentoring process to be successful, the student should be willing to:

- commit to the mentoring process
- commit time and energy

- establish clear research goals and work with the mentor to develop a pathway for achieving these goals
- accept constructive criticism
- meet regularly with the supervisor and/or mentor to discuss progress and review assignments, projects and progress
- respect and be mindful of the mentor's time, commitment to his/ her own studies and responsibilities
- seek advice when required but not become overly dependent on the mentor
- review research progress regularly both independently and with the mentor
- Raise issues of concern (academic and non-academic) in a timely fashion
- Be unafraid to ask for assistance.

3.5.4 Academic milestones

With regard to the academic component, mentors should be able to support the students by ensuring that the student is prepared or able to meet the deadlines for submission of:

- Applications (at all levels)
- Timely submission of applications such as ethics proposals, data collection (time management)
- Timely submission of protocols, data and write-ups from drafts to the final stage to the supervisor
- Registration
- Approval of research protocols
- Submission of research for examination.

Achievement of all of the above is very dependent on practical hurdles such as social interactions, accommodation, adequate funding, etc.

3.6 Problems and Dangers Associated with Mentoring

Having set out the expectations of both parties in the mentoring process, it is important to identify boundaries and to be aware of pitfalls. Mentoring is personal and intimate, and the process could come unstuck due to a number of factors. These include, in the first instance, a lack of motivation and commitment to mentoring. The mentor and/ or the student may not be prepared to invest the time and energy required to facilitate the success of the undertaking. The lack of commitment could result in hurried and superficial interactions and very little (if any) constructive interactions. Worse still, it could evolve into resentment and acrimonious interactions.

A situation may exist where the mentor may feel coerced into mentoring the student due to not being able to say no to the coordinator, needing to save face or for fear of a negative impact on his/her own career prospects. This would obviously lead to a reluctant mentor simply going through the motions, thereby depriving the student of the required commitment.

The student's failure to communicate his/her needs due to awkwardness or embarrassment or even lack of appropriate knowledge could lead to misunderstandings or even major hurdles. It is important that both the student and the mentor clearly state the goals and objectives of the partnership. Added to this is the failure on both sides to discuss problems or potential problems at the outset. The breakdown in communication or understanding may become obvious at the initial meeting or only during later interactions where personal and academic pressures are not being conveyed. It is possible that meetings would then lose their focus and become secondary to the current crises. This could lead to both parties becoming defensive and lead to acrimonious meetings.

Another area of concern is the student's inability to interpret the mentor's intentions correctly. In these instances, the student may become overly dependent on the mentor both emotionally and academically.

A large risk to be guarded against is harassment, be it sexual, religious, academic or social (class distinctions). Harassment could begin with emotional over-dependence, and incorrect or inappropriate interpretation of the mentor's intentions or vice versa. The consequences of such could lead to the academic failure of the student and mentor as these become the focus rather than the challenge of the academic pursuit. There is also the risk of conspiracy theories, superstition and general mistrust of the system or academic institution. In these situations the thought process deals mainly with these overriding perceptions. Consequently, the students find themselves being suspicious of the advice given and spending time evaluating the 'hidden messages'.

Important factors to be considered are those of language and past experiences. Failure of the mentoring process could be due to a lack of understanding or the misinterpretation of what is being communicated. In the majority of these situations, it is desirable for either or both parties to communicate honestly in order to highlight the situation. Resolution may be a direct one-on-one discussion or referrals to appropriate individuals such that where possible corrective action may be put into place or the problems overcome by a simple understanding of the needs of both the mentor and student. The coordinator or mechanisms set up to address difficulties may play important roles in resolving the distrustful, misjudged or undesirable situation. The latter should be a role played by the coordinator and institution.

It is desirable that there be regular interactions between the student, mentor and coordinator (or supervisor) to monitor the mentoring process. Institutions may take a more formal approach and request monthly independent reports from both the student and mentor that would go to the coordinator, supervisor or department head. Sensitive and diplomatic handling of any negative events is essential.

3.7 Conclusion

Obviously not every scenario or event in the mentoring process is mentioned here. The intention of this chapter is to provide insight into the major difficulties and possibilities during study towards a postgraduate degree based on individual experiences shared and gleaned from workshops. The principles remain a useful guide towards a successful mentoring programme.

Situations differ from institution to institution and this would dictate the format of the programmes suited to their needs: it is important to note the adage of 'different strokes for different folks'. Adaptation of a mentoring system is highly dependent on the environment and on the mentor-student relationship as well as the hierarchy and expectations of the department. This having been said, by applying the recommendations outlined here, all institutions initiating a mentor programme should be able to ensure a pleasant and rewarding experience for their students, who would then be able to achieve their goals.

Mentors should be aware of and recognise that graduate students new to the system are generally anxious, insecure and initially very dependent. Mentors that standout are typically experienced, generally confident and competent professionals in their own right. Their interest in the mentoring process is the personal and professional development of their students/protégés. They should generally be aware of the mentoring process and offer career/professional and psychosocial support. Most often these individuals create opportunities for their students, allow them some leeway in their work and generally set higher performance standards for them. In the end, they become very accepting of their students, are unafraid of promoting their students to share positions of authority or even senior authorship in publications, and generally open up to their students. This is the essence of the long-standing, lifelong relationship referred to at the beginning of this chapter. 4

COACHING: CHARTING YOUR OWN PATH

4.1 Introduction

The PhD researcher is immersed in a 'writing-centred pedagogy'⁵ that requires critique and encouragement from experienced researchers. While writing is central to the research process, so is thinking, imagining and relating. The learning and teaching strategies needed in supervision are varied and complex – even 'chaotic'!⁶ These supervision interactions ideally stretch and support the PhD researcher, whilst enriching and expanding the world of the supervisor. Painted with such broad brush strokes the enterprise promises colour and boldness – but it also requires finesse, detailed attention and precision of focus.

An interesting parallel to the qualities needed in the research journey are those needed by accomplished scientists. Fensham,⁷ in interviews with leading scientists in China, distinguishes the characteristics needed to succeed in both independent research and in science. These include (in order of priority): creativity, personal interest in the topic, perseverance, desire to inquire, ability to communicate, social concern and team spirit. It is particularly these qualities, on the one hand, that mentoring and coaching focus on. Supervision, on the other hand, takes

⁵ Kamler & Thomson (2008)

⁶ Grant. Mapping the Pleasures and Risks of Supervision.

⁷ Fensham, P. J. & Law, N. (2003). Beyond Knowledge: other outcome qualities for science education. Proceedings of the 11th Annual SAARMSTE Conference, Swaziland.

greater responsibility for the formal managing of the degree process, quality checking and teaching. Whilst workshops and programmes for PhD students usually provide formal training in the academic content towards thesis production, mentoring and coaching fosters qualities essential in a scientist, researcher and intellectual. A holistic approach takes into account the complexity of a large research project.

The diagram below shows the contrasting features of supervision, coaching and mentoring. Note that the student is placed at the centre – appropriate to a student-centred pedagogy.

Note: Neither mentoring nor coaching (nor indeed supervision) touches on therapy; neither deals with pathology, psychological analysis, nor with trauma counselling. It is of course, essential to be able to refer students to appropriate professionals should serious problems arise.

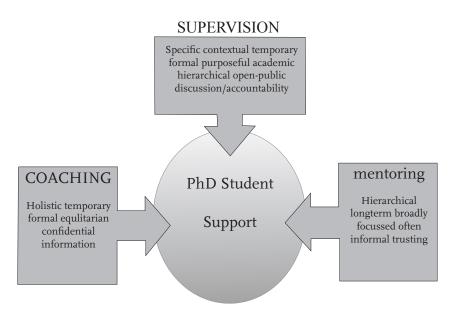


Figure 4.1 Linking and Comparing Supervision, Mentoring and Coaching

If I need a 'how-to' book – should I be doing a PhD?

By definition a PhD thesis is a unique and original piece of work. PhD students are guided, obviously, but must eventually chart their own path. After some time the emerging experts need to find their own voice, make their own decisions, be prepared to take risks, extend the conventions and eventually outgrow their supervisors. At this point of independence the map for a student becomes vague or the GPS that has been so trusty can only intone 'recalculating, recalculating'. There is a limit to the use of a road map in work that charts new landscapes. This is a developing paradox that students and supervisors face; and the same is true for 'Advice books'.

Furthermore, the implication of a 'how-to' approach is that there is 'a step-by-step' way to advance; yet a thesis does not proceed in a linear path (Kamler and Thomson, 2008). It can be more like a labyrinth. The illusion in seeing a bound and finished product is that there is somehow a neat and clear progression from the abstract, introduction, purpose, context, research questions, methodology, data, findings and conclusions. We know there are some (often frustrating) administration processes, ethics clearances, literature reviews, proposal revisions, data collection and 'write-up': but not neatly in that order. This is not usually, how it works. The research project exists within a context of equipment, finances, appointments, supervisors, weather, travel, politics, change and surprises. Just as research itself takes place within a context, the PhD researcher is in a particular context of life, work, family, colleagues, interests, distractions and constraints. There is also all the invisible processes of thinking, planning, assuming, rethinking, prewriting, journaling, mind-mapping, discussing, despairing, changing direction, learning and changing as a person.

It is probably axiomatic that a supervisor and a mentor play a vital role in the process of producing a thesis and a specialist academic. However, the process is often stressful and, in spite of the guidance from supervisors, many students do not make it. The higher education participation rate for South Africa is a low 15%. Although the rate for other sub-Saharan countries is 5%, Latin America has a substantially better rate at 31%. The average participation rate for North America and Western Europe is 70%. With our low numbers entering postgraduate studies, we need to do all we can to nurture our postgraduate students who have often struggled to reach their level of education and often represent the survivors of a tough system. In South Africa we have 27 PhDs per million of the population compared to 42 in Brazil, and 240 in Australia.⁸ Reports indicate that up to 50% of PhD students in the UK and the USA drop out4, and in South Africa that number is even higher.⁹ PhD students who take a long time to complete put a strain on a system that lacks supervision expertise.

There is some emerging evidence that coaching can be effective for supervisors, students and for both together (i.e., the relationship).¹⁰

Possible reasons for the effectiveness of coaching are that a coach addresses the whole situation and the whole person. As Kamler and Thomson1 observe:

'... the simultaneous fears and reassurances experienced by doctoral researchers are constructed within wider cultural and institutional processes, not simply in advisory relationships'. (p.512)

In a co-active coaching relationship there is equality between the student researcher (in this case) and the coach. The thesis writing provides an opportunity for self-reflection and personal – not just academic – growth. The coach encourages this broader development. The student may open up to a 'neutral' listener who can provide a new perspective on what may be happening. The coach champions the goals of the student, keeps these goals accountable to the goal's own norms along the way and keeps the goals moving.

In one PhD programme where coaching was included¹¹ the following features of coaching emerged as critical:

- Providing a neutral environment and an unbiased listener
- Allowing the voicing of taboo subjects (e.g., work relationships/ insecurities)

⁸ Source: Statistics SA and HEMIS

⁹ http://www.universityworldnews.com/article.php?story=20090529112249793

¹⁰ Mouton, J. 2009, What we know about the South African PhD and what this means for scaling-up production. Stellenbosch University, 9 October 2009.

¹¹ Coaching and Research Writing Evaluation: Gerber, H. (Presentation at CLTD by Dr Hillary January 28/1/2009)

- Acknowledging the student's aims and ambitions as well as vulnerability
- Goal setting (for motivation and tracking)
- Strengthening of desirable personal attributes
- Tracking progress and promoting accountability
- Refining self-awareness and reflection.

Outcomes of this PhD coaching programme included developing courage to confront, self-examination, awareness of personal goals, assertiveness and the resolution of boundary issues by taking increased personal responsibility.

The role of the coach is to provide a space conducive for reflection, connection, creativity and action. The dimensions a coach pays attention to are similar to those of a creative organisation (Prather and Gundry, 1995, in Palmer, 2002: 16.).¹² These are:

- Challenge and involvement
- Freedom
- Idea time
- Idea support
- Conflict
- Debates
- Humour and playfulness
- Trust and openness
- Risk taking.

Some of these dimensions are present in coaching and mentoring; some of the outcomes of the PhD programme mentioned above may be achieved in a supervisor and mentor relationship. So what is coaching then?

¹² Palmer, J. (2002). Identifying the role of creativity in the strategic process. Unpublished MBA these, University of the Witwatersrand, Johannesburg.

4.1.1 What is Coaching?

It has been the task of science to discover that things are very different from what they seem.¹³

Coaching is about discovering and walking different paths. It is a process, formally set up to help student researchers clarify their life purpose, values and goals, and to help them attain these goals in a creative and conscious way. Coaching is not about diagnosis or pathology. Coaching assumes the student researcher to be capable and creative. A coach asks: 'What's happening now?' and 'What next?' – rather than: 'Why?' A coach works with pressing external issues and personal or team goals. A coaching session is forward-looking and promotes action, aims at helping the student researcher to reach his/her potential and overcome obstacles, looks at the student's life as a whole rather than the thesis process only, and seeks to deepen awareness of patterns and provides a reflective space. Coaching provides a meta-level of assistance at developing skills of organisation, innovation and reflection. An introductory coaching conversation may sound like this:

Conversation:

Coach:	Coaching is not like supervision or mentoring; you
	need to come up with your own answers.
Student:	(Looks perplexed!)
Coach:	I will guide you with direct questions and help you
	clarify your goals. I will also push you to action and
	hold you accountable.
Student:	I don't know
Coach:	Well, what will coming up with your own answers give
	you?

¹³ Sir Arthur Eddington in McFarlane, T.J. (2002). Einstein and Buddha: the parallel sayings. Ulysses Press, CA.

4.1.2 Coaching in the context of PhD supervision

The coaching orientation here is directed towards a novice coach, supervisor or mentor wishing to coach a PhD student. Of course, a supervisor could also benefit greatly by having his or her own professional coach. Coaching first gained popularity in executive training and can be adapted for many situations.

Now, just as a supervisor needs specialist expertise, so does a coach; perhaps even more so than does a mentor. An ideal option is for a supervisor or PhD student to have a qualified coach. Such a model is being trialled to a limited extent at some universities. SANPAD is piloting the introduction of coaching for supervisors and students in parallel with mentoring (see Chapter 5).

Although a coach requires specialist training, and the coaching situation is usually a formal arrangement, there are principles of coaching that may be brought in to both supervision and mentoring, or which a student may use alone. This chapter contains an outline of some of these principles and includes exercises. The case studies of Su, Pieter and Thandi illustrate some coaching conversations with PhD students. Also included is a section, Coaching Pathways, to provide a sample overview of what a number of PhD Coaching sessions might look like.

4.2 Aspects of Coaching

4.2.1 Being a coach

Good research should contribute to your development as a mindful person, and your development as an aware and reflective individual should be embodied in your research.¹⁴

A coach brings deliberate attitudes or meta-perspectives to coaching. Much of the time we show up in a situation, relationship or event in whatever state our internal climate has already dictated. Occasionally

¹⁴ Bentz, V.M. and Shapiro, J.J. (1998). Mindful Inquiry in Social Research. Sage Publications, California

we mask these moods by 'putting on a brave face', or by playing a professional role, but we seldom consciously think of the quality we would like to contribute or bring to a meeting or function. It can make a surprising impact to go into a presentation or coaching session intending to bring a particular quality such as clarity, joy, humour or calm. This is not an artificial or manufactured mask but an authentic expression of one's being. The suggestion here is 'Try it'.

Of course, presenters and leaders often do this instinctively. In a late afternoon session of a long day a facilitator may intentionally try to brighten the atmosphere or create more energy.

The skills of coaching include: listening, intuition, awareness, reflecting back (rephrasing, rewording or mirroring a situation), staying focussed, discovering and reminding the PhD researcher of his values, acknowledging the PhD researcher's qualities, and linking the current direction to his life-purpose. **Unlike a supervisor or mentor, a coach's own experience or story is irrelevant**. A coach needs to restrain herself from telling stories from her own life, from offering advice, or from directing the action of the student researcher. This could be clearly quite a challenge and is not our usual way of interacting. However, in this lies the power of coaching and the empowerment of the student. Yet, coaching is not mechanistic. While the coach is not likely to offer advice, she may offer intuitive insights – or even guesses about the situation!

4.2.2 Designing the coaching relationship

'How should we do this?' 'What do you need from me?' 'What can I count on from you?' 'How will this relationship work best?' 'Let's discuss and negotiate our needs and wishes, given all the practical constraints here.'

More so than supervision or mentoring, a cornerstone of coaching is confidentiality of discussions. It is also a negotiated and designed relationship. A coach may ask for example: '*How do you want me to be when you procrastinate?*' or '*What do you need from this coaching relationship?*' Su unequivocally told me: '*Nag me! Nag as much as possible*: I need that.' Pieter on the other hand said: '*I need you to be understanding – I have enough people yelling at me.*' It would probably be unusual for a supervisor to ask a student '*How would you like me to supervise you?*' Yet Thandi, in our second coaching session, said: '*Actually I need you to be straight with me: please point out my blind spots. I can take it.*' She also added: '*I need definite structure. I would like to set up all our meetings for six months, and have you keep me to strict timelines. I need help with organisation.*' As a coach, I need the student researcher to keep appointments, to be real, and to give feedback about how the sessions are going. Coaching sessions address the meta-level of the process as well as the fine details of lining up the trucks. We spend time talking about how we want this relationship to work. We also set up logistics and timeframes.

4.2.3 Paying attention to the creation of a vision

'- ah, to imagine is to experience the world as it isn't and has never been, but as it might be.' $^{\rm 15}$

Being able to create a vision is a uniquely human capacity. According to Gilbert, however, there is confusion around this. People tend to believe that they have control over uncontrollable events and yet sometimes back away from intervening where they do have control over outcomes, or at least a reasonable chance of influencing events. Gilbert sites various studies that show how gamblers are more convinced of their chances of winning if they can chose their own lottery numbers. I do that too - even while I recognise my foolishness! Yet when I put in a funding grant application, I imagine the chances of success have little to do with me. In his chapter entitled 'The Joy of Next', Gilbert claims: 'The greatest achievement of the human brain is its ability to imagine objects and episodes that do not exist in the realm of the real...' and '...the human brain is an "anticipation machine".' Of course it is obvious how handy this skill is in designing research, but it is also to be exploited in encouraging research students' to see themselves as expert academics and devise steps to get there. However, coaching is not mechanistic; a coach looks out for opportunities to change direction, to transition, and looks for

¹⁵ Gilbert, D. (2007). Stumbling on Happiness. HarperCollins, London.

outcomes, but is not attached to particular destinations if circumstances change.

An important part of assisting a student researcher to create a vision is that the vision is unique and personal and ties in with the individual's values. For one student the research process may need to be conceived of as exciting and adventurous, and include making a difference to political transformation. For another, it might embody values of order, safety and thoroughness. By bringing in personal values and exploring what these might mean in the process, in supervision, in writing and in the establishing of an academic identity, the student's energy and motivation are enhanced. Tools for facilitating this are included in the following sections.

4.2.4 Perspective: We can choose how we see things

You have brains in your head. You have feet in your shoes. You can steer yourself Any direction you choose.¹⁶

Of course, we would rather have a sea-view suite than a room in the basement. We would rather our studies were a walk in the park, a piece of cake, a blast! – rather than an up-hill struggle, a battle, a never-ending story or a wandering in the wilderness. By changing our metaphors and our cup half-full or half-empty tendencies we can change our degree of enthusiasm to keep on task. Well, if it was as easy as this, we would all always be energetic and motivated. We know that it is not. A coach can help to offer different ways of seeing a situation and help the student researcher to get in touch with what resonates with an inner agenda or personal life goal. Questions a coach might well ask are:

'What is the landscape of your life right now?' 'In what ways does your research feature on this landscape?'

This results in exploring in a focussed yet open-ended way so as to establish a clearer picture of what is going on.

¹⁶ Dr Seuss, (1990). Oh, the Places You'll Go! HarperCollins, UK.

Another perspective conversation might go like this:

Coach: Student: Coach:	'If your PhD research were a landscape, what would it be?' 'An airport: O.R. Thambo airport!' 'Tell me about that.'
Student:	'It's a place I know well – but I still get lost there. As I approach, I am filled with anxiety. There are parts that I know and then all the activity, changes, overload of information.'
Coach:	'It sounds like an overwhelming place. Does it also hold some excitement?'
Student:	'Yes. It means I am going somewhere. It is a vibey place!'
Coach:	'In what ways are you "going somewhere" in your research?'
Student:	'HmmmWell, no-one's done what I'm doing. I don't know where it will end up. That's exciting'

The conversation might well follow this metaphor for a while, exploring characteristics and how this relates to research study. The end of the session almost always should lead either to a commitment to action on the part of the student researcher or, otherwise, to an inquiry.

4.2.5 Moving forward

- Action: Definite steps are set often by the student. The coach will ask for feedback/ confirmation that the task is done (an email, SMS or report back at the next session).
- Homework reflections: these are inquiry questions designed by the coach to promote self-awareness in the student, for example,

Inquiries:

- What is keeping me going?
- What am I saying 'yes' to?
- What does it mean to excel?
- Where am I stuck?
- What kind of an academic am I?

Having considered these as a reflection exercise, the student would report on what came up and how this is significant for moving the work forward.

4.2.6 Centredness and focus

Admitting that we do not know and maintaining perpetually the attitude that we do not know the direction necessarily to go permit(s) a possibility of alteration, of thinking, of new contributions and new discoveries, for the problem of developing a way to do what we want ultimately, even when we do not know what we want.¹⁷

Growth, change, innovation and creativity are dependent on seeing clearly and getting out of a rut. The ability to do this is greatly enhanced by being able to amplify attention to the task in hand: to be in the moment. This a central practice for both coach and the student. By keeping focussed, we have a better chance of seeing what is really going on and what needs to happen next. It is obvious how powerful a practice this is for knowledge creation and research.

This practice in a coaching relationship is often uncomfortable: we seldom really listen to others or to ourselves. We more usually engage in habitual, even ritualised conversations. A coach may sit in silence for a while to allow space for what is difficult to say. Coaching is at its heart a mindfulness practice. A coach tries to be totally present with openness and non-judgement. The difficulty here is letting go of advice, projection and stories. This relates back to a core coaching premise that student researchers are capable of coming up with their own solutions.

4.2.7 Intuition

Sometimes we know without understanding the knowing. Sometimes this knowing is more reliable than that obtained from rigorously analysed data.

¹⁷ Feynman, R.P. (1998). The Meaning of It All. Penguin Books, London.

Malcolm Gladwell writes a fascinating account of the 'Statue that didn't look right' in Blink.¹⁸ When, in 1983, the J. Paul Getty Museum in California was offered a kouros statue apparently dating from the 6th century BC, scientists spent 14 months verifying its authenticity through electron microscopy, X-ray diffraction, electron microprobe and X-ray fluorescence. One scientist even published a paper in Scientific American on the extraordinary find. The museum agreed to pay \$10 M for the statue. In the meantime, various artists who viewed the work exclaimed within seconds that it did not look right; it looked 'fresh', and they certainly would not buy it. It turned out that their intuition was correct: the kouros was a fake! This helps to illustrate the power of different ways of knowing that we do not always use – especially in our professional work. A coach is encouraged to get in touch with intuition and use it to shed light on what is happening with the person being coached.

A coach may offer: 'It seems that there is something else happening here apart from the time constraints you mention.' Sometimes the 'hunch' may be quite specific. When designing a relationship with the student researcher, the coach explains the use of intuition – and asks permission to blurt out possible insights. These need to then be checked and, if they are off the mark, they are simply dropped. This exploratory openness is part of the coaching dynamic that allows for: tentative answers, making mistakes, taking risks, thinking out of the box, and for the student to also take over control and redirect discussions.

4.2.8 Reflective meta-perspective: 'telling it like it is'

'It looks to me like this thesis is not a priority for you.'

A coach needs to articulate what is happening, or at least offer a reflection of how things appear – without judging. Making such a statement as the one above might be difficult for a supervisor. There is the hierarchical relationship and quality judgement – but for a coach there is an agreement of being a friend who can be frank and help explore the un-named agendas, saboteurs, cover-ups and unconscious

¹⁸ Galdwell, M. (2005). Blink. Penguin Books, London.

tendencies! As mentioned under 'intuition', this is done respectfully, with the student offering counter observations, declining to discuss, or expressing willingness to explore what is going on.

This may also be considered as giving feedback. In supervision, feedback is usually about the text or research process. In coaching, the feedback is holistic. It is often reflective: 'I noticed you started drooping in your chair when you mentioned the up-coming seminar. It seems there is a heaviness about that.' Such feedback opens up the opportunity to discuss something that might have been glossed over or that the student may not even have been aware of.

4.2.9 Relationships

'We all live our lives in a sea of connections.'¹⁹

Individual coaching has the limitation of not directly including others in the PhD process, even though they are inextricably connected to the PhD researcher and thus to the process. It is therefore sometimes helpful to consider coaching a 'relationship' or team. Coaching can be useful for a research team, for a supervisor and student together, or for a research student and his or her partner. This relationship coaching is not therapy; it helps to find a way of co-creating a path and a way of working that is constructive and fulfilling for the team. In the process we acknowledge that we create ourselves and our futures through interconnections. The same principles – of making actions conscious and choosing how we want to be – are core to relationship coaching.

A coach can explore questions with two or more people together:

'What is important here?'

'What's getting in the way?'

'How do we want to be with each other when things get tough?'

'What can we count on from each other?'

'What will make this partnership flourish?'

¹⁹ The Centre for Right Relationship, (2005). Organisational and Relationship Systems Coaching Manual. CA.

Seeing the situation from the other perspective: the concept here and the accompanying exercise are based on the assumption that the PhD thesis is an 'entity' in itself. We habitually view the world from our perspective only; we are encouraged here to see our research from both the point of view of the student, from the point of view of the supervisor and the 'view' of the thesis itself.

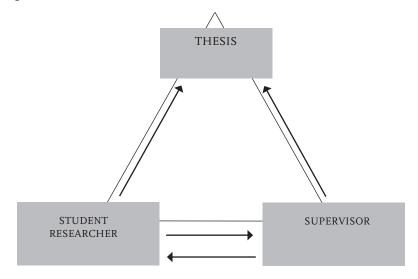


Figure 4.2.9 The Thesis Exercise: 'Third entity exercise'

A coaching example of this is given in the section 'Coaching Pathways'.

4.2.10 Giving Feedback

By receiving insightful assessment on our qualities, ways of interacting, values, or path of action, we understand how we are perceived by others. Such feedback also helps us to reflect, adjust and grow. In coaching, feedback is expected from both coach and student researcher. Feedback needs to be specific and needs to provide suggestions as to how the coaching or action could be more effective. For example, a coach may ask: 'In what ways is the coaching helping you? How could it be more effective?' A student being coached may ask: 'What do you

see that I am not aware of?' It is clear from this last question that the student needs to be aware of the 'rules-of-the-game' of coaching. It is part of the coach's task to *train* the student in the goals and principles of coaching.

Positive feedback is part of the fabric of a coaching relationship. Acknowledging the qualities and achievements of the coachee helps build confidence, self-esteem, self awareness and motivation. Perhaps because 'critical thinking' is so valued in academia, we tend to become easily critical and can forget to acknowledge the positive. It is not unusual for a student or academic to go for years without anyone giving them confirmation that they are 'insightful, bright, dedicated, determined...' and so forth. Considering how much criticism a PhD researcher is subjected to, there is often a gradual eroding of a student's confidence. A coach is encouraged to give the student acknowledgement every coaching session. If only **one aspect** of coaching for PhD supervision were to be taken up, **acknowledging** the student researcher would be the most constructive and effective!

4.3 Coaching Pathways

In this section a possible outline of a series of eight coaching sessions will be presented. Obviously, many of the coaching skills may be integrated subtly or explicitly into any supervisory meeting, they can also be used as appropriate in varying order in coaching sessions. The session layout is not quite a 'literal' guide to the process. It is clear that follow-up from previous sessions is necessary – and this may take the coaching in completely different directions. The 'menu'-type layout presented here is meant to give an overview of how coaching may work over time. The assumption here is that these processes are less familiar than supervisory sessions where PhD researcher and supervisor are discussing research progress. The outline is, however, condensed and is provided for supervisors who have participated in mentoring and coaching training. This chapter is premised on the assumption that the supervisor or student researcher has some familiarity with co-active coaching processes. In Session 8 of the Pathways, there are some suggestions for using creative writing for coaching. This aspect has the advantage of also serving as a self-coaching tool.

4.3.1 Session 1: Building a relationship

- *Introduction* Explain briefly the principles of coaching; how it differs from supervision, mentoring and therapy. Discuss the ethics of confidentiality. (See 'Introduction to Coaching Form' in *Templates*)
- Find out about the student

Note that 'story lines' are always kept to a minimum in coaching (unlike therapy).

- Design the coach-student partnership: set up agreements

Discuss (quite frankly) what kind of relationship this will be and what will make it work. Set up logistics for meeting times, accountability and number of sessions.

- Discuss the aims of coaching

A new student requires training on how to be coached. This is often a new way of relating. A coach seeks permission to challenge, push, inquire and make it clear that all this is negotiable in a relationship that seeks to be equal and democratic. Coaches keep their own experience out of the picture (This is hard to do!) and they expect a student researcher to come up with their own solutions. Like most rules, of course, this one is also broken: at times the coach may ask: 'Will you have the next two chapters completed by next week?'

4.3.2 Session 2: Values

- What are the student's values? Ask the PhD researcher about a Critical Incident when he or she felt in control or striding forwards, etc. Sharing such experiences amplifies the event and serves as a model to reveal qualities and values. Note down the values you, as a coach, see in the situation and ask the students what values they see. Spend time discussing and clarifying these values. Helpful questions to elicit values include:
- What is present when you are at your best?
- How would you like to be in the world?
- What is your unique contribution?
- What is the role of our own gremlins? Discuss how we sabotage ourselves.
- What are the negative inner commentaries regarding the PhD research?
- What gets in the way?

The Yogic sages say that all the pain of a human life is caused by words, as is all joy. We create words to define our experience and those words bring attendant emotions that jerk us around like dogs on a leash. We get seduced by our own mantras (I'm a failure ... I'm lonely ...) ... 20

Saboteur myths

- Suffering is inevitable
- Worry is warranted
- It's not good enough
- · Anxiety has value
- More is better
- Guilt is deserved
- I will do bad work and look like an idiot
- I can't
- It's all too much

²⁰ Gilbert, E. (2006). Eat, Pray, Love. Bloomsbury Publishing, London, p. 340.

- There's no time
- It's not fair
- Not again
- I'll start next week
- I've got too much to do
- They don't give me space/time/conducive conditions...

A homework inquiry for the student may be: 'What am I withholding?' 'What do I resent?' 'What do I regret?' Ask the student to draw their gremlin(s) and give it/them a name.

☺ Acknowledge the student

4.3.3 Session 3: Where are you now?

- Discover the level of achievement in aspects of study and life: Discovery Wheel.

The student researcher rates his/her perceived level of achievement/satisfaction with the aspects presented in the wheel.

The coach probes what the scores (out of ten) mean for the student.

Choose an aspect of the wheel to work on.

Ask direct/powerful questions, such as, 'What would a 10/10 mean for you in your career?'

Give an inquiry or task for homework, or ask the student to come up with a follow-up activity.

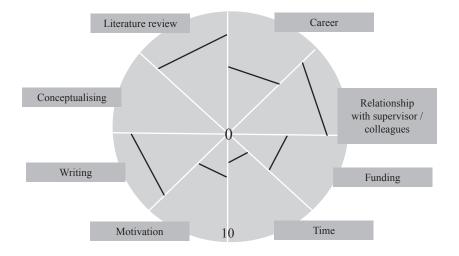
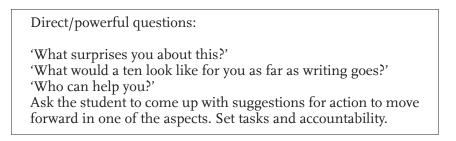


Figure 4.3.3 PhD Discovery Wheel (A completed wheel may look like this:)



4.3.4 Session 4: Practicing Focus

- Clear anything that might be in the way of a session. Spend only two minutes on this. For example: 'What do we need to get out the way for you to arrive on time?' (Student grumbles about being stuck in traffic or marking, etc.)
- Check homework accountability.
- Choose a small current aspect to work on: 'What about this is important to you?'
- Build intrinsic motivation: 'What thrills you?' 'What is compelling about this?'
- Establish accountability: 'What will you do next?' 'When will you do it?' and 'How will I know?'

4.3.5 Session 5: Perspective

Keeping a balance in one's life is not easy most of the time – never mind amongst the pressures of PhD research.

- Start from where we are: where's here? How does it feel? Connect with the body. Settle and take time to be present. 'What's happening now?'

What perspective does the student researcher have on a particular aspect of the PhD or the whole process? Name or use a metaphor for this attitude/perspective. An example would be: 'As far as the literature review is concerned I feel like I am lost in a maze.'

(It is helpful to move around for this exercise.)

Then, physically move to a different perspective: 'What is the "seeing as far as the horizon" perspective like?' – ask this while looking out the window, standing next to the student. Check out this perspective. 'What does this feel like?'

Find another perspective: for example, move to staring at the book-case. 'What does the book-case perspective feel like?' Ask the student researcher to choose the perspective that feels best. Physically move to that perspective. Get a feeling for it. Move on to designing a way forward and setting up tasks.

☺ Acknowledge the student

4.3.6 Session 6: Fulfilment

Discover the Dream

- What is compelling about the research?
- What is compelling about being an academic?

What would your future self say?

- A vision exercise of picturing yourself as a PhD doctor. Take time to talk through this vision.
- 'Who have you become?'
- 'Where are you in this situation?'
- 'What advice does your future self give you?'

'What is the next step?'

Set tasks and accountability.

© Acknowledge the student

4.3.7 Session 7: Relationship/team coaching

Ask the student researcher to describe a relationship with the supervisor and with the thesis. (Refer to the triad diagram, Figure 4.2.9)

Ask the student researcher to move to another chair and describe how things look from the supervisor's perspective. Then ask the student to move to a third position, that of the thesis, and describe how things look from the perspective of the thesis itself.

(This sounds very strange but can be surprisingly effective!) 'What is trying to happen here?'

Find actions that support new insights that arise from this.

4.3.8 Session 8: Coaching through creative writing

We have already considered the role of creativity (which deserves considerable attention in research as a high level of cognitive skill). It is worth noting some of the obstacles to creativity before engaging in this coaching through writing. Gundry (1995) lists four stumbling blocks which are no doubt familiar to us:

- · Judging ideas too quickly
- Stopping at the first good idea
- Failing to 'get the bandits off the train'
- Obeying rules that don't exist.

One of the ways over these obstacles is to free-write. Set this as an exercise.

4.3.8.1 Self-reflection free-writing²¹

Free-writing is a way to get over writer's block, to discover one's own voice, clarify thought and to simply keep the writing and thinking processes going. The only rule in free-writing is: not to stop writing! Invite a student to complete a sentence such as this: (set a time for writing, e.g., 4 minutes.)

The thing about being a PhD researcher is

Or:

What uncommon questions cross your mind? Write a list of these.

.....

In research we need not only to note what is there, but what is not there; what people are not saying; what questions are not being asked.

We note forms. We often miss the spaces between.

Write about the formless in your thinking:

.....

String theory; particles; excited electrons: we can hardly talk in any discipline, including science without the use of metaphor.

Use a metaphor to free-write about your research project. (Do not think about this – simply free-write!)

• My PhD is like a

^{21 (}adapted from Cecile Badenhorst: Scribe's Journey, 2006)

4.4 Conclusions

This section was intended for those who have some coaching experience. It has attempted to show how coaching skills and principles may be integrated into supervision. If even some of these ideas are tried out, the supervision-student relationship is likely to be enriched and enlivened.

THE RELATIONSHIP BETWEEN PhD CANDIDATE and SUPERVISOR

5.1 Styles of Supervisor-Candidate Relationships: A typology

5.1.1 Introduction

Every PhD supervisor is different and every PhD candidate as well. Hence, relationships between a supervisor and a PhD candidate are full of idiosyncrasies and peculiarities. Many are the stories about strange professors, with odd habits, and full of eccentricity. And among professors, memories of strange misunderstandings with their PhD candidates form part of their discussions over drinks. However, there is order in this chaos. In a number of SANPAD supervisory workshops in South Africa, and in Ceres training courses in the Netherlands, we experimented with an approach in which a typology was designed of possible relationships. Participants in these workshops were then first asked to position their own relationship with their former PhD supervisor in this typology. As a second step they were asked to do the same with each of their prior and current PhD supervision relationships. And, indeed, there appeared to be order in the chaos, but with a lot of comments. Let us first look at the typology as such.

5.1.2 Styles of Supervision

In discussing styles of supervision there are the following important variables:

- Relationship behaviour: businesslike or personal
- Task behaviour: commitment (more/less) and product or process orientation

Businesslike behaviour can be defined as a type of relationship where first and foremost supervisor and PhD candidate focus on their work: the research to be done, the research design, the progress of analysis, writing and publication strategies. Personal elements are less important, and in extreme cases, regarded as completely irrelevant or taboo for discussion.

Personal behaviour is the opposite: the focus is on personal matters, and in extreme cases work is hardly ever mentioned. The supervisor knows, or tries to know everything about the personal circumstances and characteristics of the PhD candidate, and in meetings personal affairs and emotions get a lot of attention. Often there is or develops a relationship of personal or family friendship, sometimes progressing further than that.

Task behaviour can be very minimal on the part of a supervisor, with hardly any time and energy invested, or it can be very intensive, with daily meetings and lots of joint activities. However, if there is a substantial relationship, it can be of two kinds: a product orientation or a process orientation. In extreme cases of a product orientation, all meetings are always about the results, with a tendency to focus on concept publications or chapters. In extreme cases of a process orientation, meetings are never about results, but always about the process to get to results. In the first case scenario, supervisors generally have schedules of meetings about the discussion of written chapters, and they tend to stick to deadlines. In the second case scenario, supervisors see their role mainly as process managers, stimulating candidates to grow. If candidates are confronted with delays in writing or writing blocks, the first type of supervisor cancels planned meetings, and only wants to meet if there is a written product to be discussed. The

second type of supervisor tries to resolve the deadlock, and has intensive meetings to do so. However, sometimes the more extreme types of process managers are very superficial or negligent when there are products (chapters, the thesis as a whole) to be discussed.

If we look at this typology in a systematic way, six matrix cells can be differentiated, and names can be given to each of the six styles of supervision.

RELATIONSHIP Orientation	TASK ORIENTAT	ION	
BUSINESSLIKE	NO/LITTLE	YES PROCESS	YES PRODUCT
	Delegation	Expert guide - director - innovator - coordinator - monitor - broker	quality controller
PERSONAL	FRIEND	COACH	EDITOR

Table 5.1 Typology of Supervisor-PhD candidate relationships

We will briefly sketch the characteristics of each of these six types and focus first on the role of the supervisor. Of course, we should add that a relationship with a PhD candidate also depends on the degree of independence, self-security, expertise, maturity, motivation and commitment, ability to articulate wishes, communication abilities and styles of both the candidate and the supervisor. It also matters if there is only one supervisor or if there are more, and if one of those plays a role of daily supervisor.

5.1.2.1 Delegation ('leave me alone'): low intensity and businesslike

These supervisors are often deans, heads of departments or leaders of large-scale research programmes. They successfully acquire PhD projects and often are approached to do so because of their prestige in funding circles. However, they do not really have time to be fully engaged in the actual task of supervision and often this is 'part of the deal' (although the funding agency might not be aware of it, or be happy about it); 'delegators' often tend to 'manage a research empire' in which the real work of supervising PhD candidates is left to others to whom the 'real supervision' is entrusted. However, on paper they are responsible to the funding agent and, when candidates do their exams or graduate, they have to play a role, and they are also formally responsible for progress and final reports to funding agents. Other words for 'delegator' can be: *entruster, devolver, transferor* of PhD supervision responsibilities.

5.1.2.2 The friend ('be my buddy'): low intensity but personal

These supervisors never talk about the contents of the research work or it is very rare that they do. Often they know the PhD candidate as a former student with whom a friendly relationship developed or as a family friend or colleague, and they supported the person to start doing a PhD. Meetings are often at home, either with the supervisor or with the candidate or in pleasant places outside work, and beyond an occasional question, 'How are things going,' there is little contact about progress or products. But there may be very regular contact about all types of other items. As in all friendships, the supervisor is interested in the person, and if he/she feels that things are going wrong, he/she will try to solve those problems, but indirectly. There is an element of avoiding confrontations, not to jeopardise the friendship. Other words for friend can be: *supporter, buddy, confidant*.

5.1.2.3 The expert guide ('tell me what to do'): higher intensity, businesslike and process-oriented

These supervisors keep a distance from their candidates as far as personal elements are concerned. Some don't know or don't want to know about the family/household background of their candidates, and never visit them at home. They see their major role as stimulating a process of work improvement and they guide their candidates to grow as scientists. Several types of expertise can be differentiated, and

²² Here we would like to acknowledge a very useful publication in Paradigms (Khan and Lackay, 2005), based on Quinn et al., 1990, and Vilkinas, 2002 (thanks to Prof. Theo Haupt of CPUT). We will come back to Khan and Lackay's contribution later.

hence this role of expert guide has quite a number of sub-roles:²²

- a) the *director*: the supervisor who puts a lot of emphasis on directing the candidate in certain theoretical and methodological directions, with a lot of attention on theoretical embeddedness, methodological issues and for the research design; these supervisors will very much stimulate their candidates to consult relevant journals and engage in discussions with many relevant experts in the field; they will stimulate them to go to methods courses, to 'improve your academic writing' courses and the like; they will also stimulate the candidate to perform in conferences, workshops and faculty meetings, and there is a lot of attention paid to the preparation of candidates for these performances, focused on argumentation and analysis. If supervisors go to the field for fieldwork supervision, they tend to focus on the quality of data collection and on the chain of argumentation, along with the place the various sources of knowledge gathering occupy; other words for this function are master, authority, specialist;
- b) the *innovator*: the supervisor who stimulates pioneering thinking, at the edge of current scientific thinking and who has a vision of social and scientific change, along with an ability to stimulate creative ideas;
- c) the *coordinator* always puts an emphasis on work schedules, on adhering to deadlines and on process planning; in cases of group supervision or joint research, the coordinator will make sure that the various parties play their roles in an orderly fashion;
- d) the *monitor* always measures progress against work schedules, and is generally very active in making summary notes of meetings and writing the history of the project;
- e) the *broker* will ensure that other parties (in or outside the department; funding agencies) deliver funds and assistance to the candidate and the research project; they will maintain contacts with a wide variety of network partners who might provide useful roles later.

5.1.2.4 The coach ('steer my ambition'; 'groom me into academics'): higher intensity, more personal and process-oriented

These supervisors are also very much involved in the growth of a candidate, but not so much as related to their PhD job as such or in so

far as the content of their work, but to the growth of their personality. They will put a lot of emphasis on styles of performance in public, scientific fora. They will stimulate candidates to go to presentation training courses and before examination they will suggest mock exams, and they will stimulate candidates to attend many PhD examinations, if these are public affairs (as they are in the Netherlands). They try to understand the personality of the candidate and are aware of their personal circumstances. Whenever there are problems at home or with the (psychological) health of the candidate, the coach will try to be part of finding solutions. The coach is also interested in stimulating the scientific career of candidates beyond their PhD and will actively try to assist them in networking. In the first stages of PhD training, coaches are often involved in facilitation as well: with advice about time management, funding, library, information and other resources, and there is or should be discussion about research ethics and proper research etiquette (and what happens in cases of misconduct, such as plagiarism, financial dishonesty, sexual harassment and theft of intellectual property rights).

5.1.2.5 The quality controller ('keep me sharp'): higher intensity, businesslike and product-oriented

These supervisors put a lot of emphasis on the written products of their candidates and continuously judge those products on aspects of scientific quality. They only want to meet and discuss after agreed submission of a concept chapter or publication. They will stimulate their candidates always to go for the most prestigious journal and the most influential conference in their fields. Their comments are often of a judgemental kind, without detailed and supportive suggestions for improvements: 'They have to learn it the hard way.' They are often extremely cross if candidates do not work according to the agreed schedule, and they are very conscious of timelines and deadlines. If there is an agreed and restricted period for supervision (e.g., the funding agency provides funds for three years), they will generally refuse to continue substantial supervision beyond that period, and they will agree to measures by a department of no longer facilitating candidates (no room, no computer, cancelled institute email address). Other words for quality controller can be: producer, auditor, assessor, grader.

5.1.2.6 The editor ('help me write'): higher intensity, more personal, product-oriented

This is the type of supervisor who is very product-oriented as well, but who will put substantial amounts of time and energy into correcting mistakes. There is much emphasis on language, both on concepts and on ways of expression, on spelling and on communication in general ('how to reach your audience'). Candidates always get their work back covered in red marks or – if they have an electronic relationship – full of track changes. Some supervisors would, often after two or three failed attempts to improve the style of reasoning or writing, take over and suggest sentences, paragraphs or even major parts of the thesis. Some will hire the services of professional editors for support. Most editor types of supervisors try to understand the reasons for inadequate (not-yet adequate) quality by trying to know more about the candidate and his/her training. Other words for editor can be: *product advisor, scientific language assistant or trainer, corrector, reviser*.

5.2 Types of PhD Candidates, Culture and Dynamics

5.2.1 The independent student

Supervisory styles have to do with the personality and position of the supervisor(s), but they also have to do with the personality and position of the PhD candidate. Some candidates have a very independent attitude, and they want to do the job alone. They would prefer a 'delegator', without a 'circus of supervision' around them, and they want to keep the supervisor at a distance. In extreme cases, they will meet once in the beginning and, the next time, a few years along the line, the candidate presents a full product and graduates on the basis of that product without a single word exchanged in between. These types of candidates do not like being told to go to courses; if they need some, they will organise it all themselves.

5.2.2 Students preferring a personal relationship

Some PhD candidates do not mind a personal relationship with their supervisor, as long as there is not much (or even no) discussion about the progress of the PhD work or its products. 'You will see it when I am

ready.' If there are problems (e.g., about funds for doing the research or about facilities), they will spread word of it in the circle around the supervisor, and expect their friend to become aware of it and work on a solution.

5.2.3 The businesslike student

There are many PhD candidates who would like to keep the relationship businesslike and who do not like any interference in their personal lives. Businesslike, product/task-oriented personalities like defined roles, clear goals, planned timing, agreed communication patterns and behaviour, and reliability on both sides. They find it irrelevant and sometimes even a bit confrontational for supervisors to know about their home situation. But they like being guided to become a good scientist and prefer a cool, efficient style for meetings that give them useful suggestions about what to do next and how to improve. In some cases, they do not mind, or even like, knowing continuously if they are on the right track, and they prefer supervisors who continuously create an experience of examination in all their meetings. They always try to perform at their best during these meetings and like being judged on the quality of their performance.

5.2.4 The personal-interest, interactive student

On the other hand, there are PhD candidates who abhor those practices and who cannot function without a personal touch and interest in their life and personality as a whole. Personal-relationship, processtask personalities are personality-oriented, empathic, liking socialemotional bonds, with trustful and fluid arrangements. They prefer meetings which start with small talk and they like to share experiences beyond the PhD work. Some prefer getting continuous advice on their performance, with attention to their personality; others prefer focussing on their written work, but they expect a lot of detailed, tothe-point suggestions for improvements. On really difficult parts of the analysis or of the writing process, they would like their supervisors to take co-responsibility, either for doing the job together or for hiring expertise for expert assistance.

5.2.5 Chemistry between student and supervisor

The success of a supervisor-PhD candidate relationship partly depends on what often is vaguely called the 'chemistry' between supervisor and PhD candidate. Often there has been some kind of prior contact, for instance, because the PhD candidate was a former student of the supervisor. In cases of previous incompatibility, it is unlikely that people would start the arduous journey of doing a PhD project together. But cases of incompatibility may happen when there are bureaucratic procedures in which candidates are accepted for a PhD project on the basis of their written academic curriculum vitae and supervisors accepted by them without much or any prior contact. Things can go wrong, and that is often quite clear already in the early phases of a project. It is also possible that things may happen between supervisor and PhD candidate which make them change their preferred style. Relationships may become too personal and tensions may develop, which can only really be solved if both supervisor and candidate agree that they should behave in a more businesslike fashion. Particularly when candidates and supervisors spend some time together in the field, far from home, each may encounter characteristics in the other which may jeopardise the relationship, and this may only be solved by agreed to changes in behaviour (or an agreed truce, as long as the PhD project is ongoing), or they split up and the PhD candidate looks for another supervisor.

5.2.6 Departmental culture and the student

What may also influence the relationship is the research (and power) culture in the department, along with institutional changes happening during the process of a PhD project. In cases where departments hire professional assistance with editing scientific work or have in-house training facilities for training in writing academic English, editing roles for a supervisor may become less relevant (and rather expensive to spend their time on). In cases where departments set up a fully institutionalised mentoring and/or coaching system (see elsewhere in this book), the role of mentor and coach may no longer be played by a PhD supervisor. There are departments in which all roles have been more or less formalised in separate functions, with a dean playing the role of delegator, an institutionalised peer group of PhD candidates playing the role of friend, the best specialist in the field of the PhD study (or a

group of them) playing the role of expert guide (with psychologists and even lawyers behind them for difficult situations), a research manager playing the role of quality controller, and a professional editor assisting in writing and communication skills. There are cases in which PhD candidates of the same supervisor form informal groups to evaluate and guide their relationship with the supervisor, and sometimes these come to an agreement as to how to avoid certain styles of supervision or how to teach the supervisor to do a better job. In some departments there is an atmosphere of informality, with staff, PhD candidates and students often meeting each other in canteens, coffee shops or even bars, and in which regularly meetings are organised at the homes of the leading professors. Most departments have a regularised arrangement of scientific and departmental meetings in which PhD candidates (or all staff) present their work in progress ('brown bag' lunch meetings, five-o'clock get-togethers, Friday afternoon 'feet on the table' meetings or similar get-togethers). Other departments do not have those at all, and staff and PhD candidates scarcely meet. The office situation of the department matters as well, of course. If all PhD candidates and all research staff work together in the same building and share the same secretariat and coffee machine, informal contacts will be more regular than if spaces are far apart.

Departments are also part of larger bureaucratic institutions. In the Netherlands a major change took place when the individualised and rather chaotic PhD situation in many departments was streamlined under the umbrella of research schools. But growing bureaucracy also means more emphasis on assessments, and peer reviews of performance and results. In cases where PhD projects are restricted in their time frame (e.g., due to funding arrangements or labour laws), this may be treated more as a guideline than a situation that really has any serious consequences. However, when departments are forced (or force themselves) to become more strict, relationships which started as rather personal and process-oriented, may gradually become more tense and ever more bureaucratic or product-oriented. This can happen particularly when departments only receive new PhD funds if old projects are completed (and theses successfully defended), or when research departments are no longer allowed to give any support/facilities to PhD candidates who are not ready in time; then relationships may really change.

5.2.7 The dynamics in styles of supervision

Although each relationship between a supervisor and a PhD candidate is different, and styles of supervision often change in the course of supervision, it is possible to see a certain logic in these changes in styles of supervision during the course of a PhD project. If there is no prior relationship between PhD candidate and supervisor, the initiation of a new project (1) often starts in a businesslike fashion, with no task orientation yet on the part of the supervisor. Often the formal establishment of a link is done in a selection procedure in which supervisors may or may not be involved. When the PhD project has been agreed upon, the next step is a research design (2). During that stage, supervision often is businesslike and directed at the process. It shifts to a businesslike product-oriented relationship when the research proposal has to be presented (3). In some cases this even is a formal exam or a stage that has to be passed formally. After accepting the research proposal, PhD candidates start their actual research data collection, often doing some kind of field work (4). The relationship with their supervisor(s) shifts back to process support and, if the supervisor(s) also visits the fieldwork area, often a more personal style develops (if things don't go wrong in the field). After the fieldwork phase, the style of supervision often shifts back to a more businesslike approach, guiding the PhD candidate in the appropriate data analysis (5). During the write-up phase (6) and final (wrap-up) fieldwork (7), it becomes more personal again, gradually shifting from a process approach to product supervision, and, in some cases, to intensive editing and lay-out suggestions (8). As one approaches accepting the PhD manuscript (9), the relationship has to become more formal again, culminating in the official defence ceremony (10). Activities after the formal defence (11, e.g., joint publications) often allow for a more personal style again, and the relationship often shifts back from product to a joint process of getting journal articles accepted, or of making policy briefs, local-level popular summaries or jointly organised scientific or policy-oriented conferences and meetings. Gradually the task is completed and, if the process went well, a good personal relationship remains, along with joint pride in the accomplishments (12). The supervisory task now shifts to career advice.

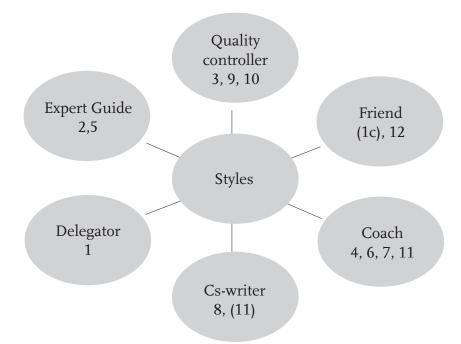


Figure 5.2 Styles of Supervision during the Various Stages of the Research Process

Key: 1 Initiation;
2 Research design;
3 Research proposal;
4 Fieldwork;
5 Data analysis;
6 Write up;
7 Final fieldwork;
8 Editing;
9 Acceptance;
10 Defence;
11 Follow-up;
12 Separation

If we put this logical process of twelve PhD steps in the matrix above, we get the following overview:

RELATIONSHIP ORIENTATION	NO	TASK ORIENTATION YES PROCES	YES PROCES
	1		
BUSINESSLIKE	Initiation		
		2	3
		Research Design	Research proposal
		5	
		Data analysis	
		4	9
		Fieldwork	Acceptance
PERSONAL		6	10
		Write up	Defence
		6	
		Final fieldwork	
		11	8
		Follow-up	Editing
	12		
	Separation		

Table 5.2 Dynamics of supervisor-PhD candidate relationship, a logical' pathway

5.3 Some Added Observations from the Literature

In one of the well-known books about 'How to get a PhD', with 'a handbook for students and their supervisors' as a subtitle, Phillips and Pugh²³ have included chapters on 'How to manage your supervisor' and 'How to supervise'; these are full of useful do's and don'ts, and, indeed as the cover promises, provides a handbook and survival manual for PhD students. It gives a lot of useful advice, but is written in generalities, and without much differentiation.

If we summarise the text that is mainly meant for the PhD candidate, the core messages are that supervisors expect their doctoral students to be independent and to present them with written work that is not just a first draft (hence more a product than a process style of management). Supervisors are said to expect regular meetings with their PhD students and honesty about progress reporting (and if expectations cannot be fulfilled to make them an issue in meetings). If asked for advice, supervisors expect that their advice is followed (but then it should be very clear what that advice is). But by far and foremost, supervisors expect their students to be excited about their work, and they value students who surprise them and who are fun to be with.

Phillips and Pugh talk about the need for PhD candidates to be aware of the management aspects of the relationship and of communication barriers.

'It is too important to be left to chance.'

They add that during the process PhD candidates tend to know more about the details of a research topic than their supervisors, which can threaten the relationship. It is important in research supervisory teams to be clear about the roles of the first and second supervisors, of daily supervisors and/or mentors (and agreed ways of communicating between these different role players), and there should be agreed rules about change of supervisors, if things really don't work out well.

²³ Estelle M. Phillips and D.S. Pugh (1994)

What do PhD candidates expect from their supervisors? Quite a lot, if we follow the long list of requirements. It is assumed that all PhD candidates expect to be supervised and that supervisors read their work well. They expect supervisors to be available when needed, and to be friendly, open and supportive. But supervisors should also be role models, constructively critical, with a good knowledge of the research area and a willingness to share their knowledge. It should be made easy to exchange ideas, preferably in a structured weaning programme, coupled with attention for the psychological elements involved. And, finally, many PhD candidates also expect their supervisors to help them get a good job after finishing. Phillips and Pugh again mention the importance of communication, being aware of expectations and evaluating those regularly. For both PhD candidate and supervisor the relationship should be geared to a process of learning, both intellectually and emotionally. There is a special word of warning for cases where a PhD candidate is also part of a larger project or programme for which the supervisor is responsible.

PhD supervision is a separate task from project management and there may be conflicts of interest.

However, the most important action for each supervisor is being a good researcher him- or herself and showing that to the PhD candidates. Joint publication and joint presentations at scientific conferences are important ways of doing that and are often of mutual benefit.

Johann Mouton (2001) differentiates four roles for supervisors, namely, adviser (an element of what we call coach), guide (what we call expert guide), quality control (we call it quality controller as well) and emotional and psychological support (he adds 'pastoral' in brackets; we regard it as part of the role of coach, but also in terms of how a 'friend' plays such roles).²⁴ Since a PhD is an apprenticeship degree, this means that supervision is crucial, and success often depends on that relationship. Mouton puts a lot of emphasis on the need for a research contract in which both PhD candidate and supervisor(s) (and their department) agree on important matters. In the Netherlands,

²⁴ Mouton, Johann (2001). How to succeed in your Master's and Doctoral Studies. A South African Guide and Resource Book

most research schools and institutes nowadays use training and supervision plans, which are regularly (e.g., annually) updated, to enable an institutionalised moment in which both PhD candidate and supervisor have to agree on work progress and styles of relationship. According to Mouton the first thing a supervisor can expect from a PhD candidate is that he or she adheres to the research contract and is aware of the requirements and rules therein. The first meeting between supervisor and PhD candidate is a crucial one, and he adds a rather long list of things to discuss and arrange in this first meeting.

Mouton adds five general rules for a healthy and successful relationship: (1) dignity, respect and courtesy, (2) no harassment, (3) accessibility, (4) privacy and (5) honesty. Indeed, the lack of one or more could lead to the failure of the relationship or may become nails in each others' coffins.

Although specifically written for the South African scholarly market, Mouton does not talk much about one of the often problematic aspects of doing research (and PhD research as well) in a context like the South African one. Erik Hofstee's book is more explicit about these contextual aspects.²⁵ Many PhD candidates, particularly those in the social sciences and in health sciences want their research work to be 'Research for Development', and many of their research subjects expect so as well. Many current PhD candidates themselves have experienced the harsh conditions of poverty, inequality, lack of access to basic facilities and human rights abuses during the time of apartheid, with some of these also continuing up until this day. Many of them have gone through very difficult primary and secondary school experiences, with South African schools having been in the forefront of the struggle for a democratic South Africa. There are many written accounts of what pupils experienced during those years, but one analysis of the struggle over education in the Northern Transvaal can be regarded as a nice joint product of South African and Dutch collaboration.²⁶ Many current PhD candidates have played roles as activists, and often this was one of the motivations

²⁵ Hofstee, Erik (2006). Constructing a good dissertation.

²⁶ Mathabatha, Ngoanamadima Johannes Sello (2005). The struggle over education in the Northern Transvaal. The case of Catholic mission schools, 1948 to 1994.

to do a PhD-level study which would also benefit the people who are being studied. The emphasis on action research, development-oriented research, and politically motivated research may clash with more 'ivory tower' attitudes among some (though certainly not all) South African supervisors. And the other way around: some supervisors do expect all their PhD candidates to be motivated by developmental urgency, and some PhD candidates may have and would like to see a bit more of a distant attitude. Everywhere in the world academics are confronted with major changes in the knowledge society in which non-traditional agencies become leaders in scientific discoveries and practices, sometimes with very few connections with the academic community (except for trying to get their best alumni). On the one hand, these are transnational corporations and other business companies with knowledgeintensive activities; on the other hand, many organisations in civil society have become knowledge-intensive and often pioneering agencies. For many PhD candidates their engagement with these new centres of knowledge will be different from that of their supervisors, and that also includes major differences in communication styles and information etiquette, with much more emphasis on electronic resources and fast, fluid ways of information exchange. Methodology textbooks are now also written by individuals based in those new centres of innovation.²⁷ It would be wise to include discussions coming from those circles, in regular discussions between PhD candidates and their supervisors.

There are many 'how to' texts available, however, not all are useful or empowering. In a recent critical review, Barbara Kamler and Pat Thomson criticized the genre for often being very paternalistic and continuing the power structures existing at many universities all over the world.²⁸ Reflecting on the type of relationship in the various stages of the PhD project and about the social psychology and educational philosophies behind these relationships may be a useful way to challenge the existing situation.

^{27 &}quot;Research for Development", produced by Laws et al., working for Save the Children, an international development and human rights NGO, 2003

²⁸ Kamler & Thomson, 2008

5.4 Conclusions

It is important for both chief supervisors, daily supervisors and/or mentors and PhD candidates to reflect on the desired and actual styles of supervision once in a while, on how these fit the personalities of the supervisor/mentor and of the candidate, and also on how they reflect the type of research, the stage in the research and the departmental, university/research school and even the social context in which PhD projects take place (with 'social' also meaning economic and cultural). It would be good to do more empirical tests about styles of supervision, using examples such as those of Khan and Lakay (2005: 45). Adapted from our typology, this empirical test uses the following questions. It can work with different scales; we have selected the Likert scale to be the most suitable here.²⁹

The basic question is: 'How important a contributor did/do you find each of the following supervisory roles to be in assisting you towards completing your thesis?'

- Delegation
- Friendship
- Expert guidance (if wanted, with further detail: director, innovator, coordinator, broker or monitor)
- Coaching
- Quality control
- Co-writing (or editing)

The test can be taken after a project has ended (with or without a thesis product, an ex post approach) and it can be taken during or even before a project starts (as an ex ante discovery of desired relationships), and with more or less sophistication.

Using the same approach, more specific questions are: 'How important were (or would you like to be) the supervision styles in the various stages of the PhD process', differentiating between: 1= Initiation, 2= Research design, 3= Research proposal, 4= Fieldwork, 5= Data

²⁹ The Likert scale: 1 = not at all important, 2 = not very important, 3 = moderately important, 4 = very mportant, 5 = extremely important/crucial

analysis, 6= Write up, 7= Final fieldwork, 8= Editing, 9= Acceptance, 10= Defence, 11= Follow-up, 12= Separation, or any other stages that are relevant in the particular PhD project.

For ex post evaluations PhD candidates can also be asked to add a judgmental question: 'How good or successful was each of your supervisors in playing the various roles (in the various stages of the PhD process)?' – again using a five-point scale: 1= very bad/unsuccessful, 2= not successful, 3= moderately successful, 4= good/successful, 5= excellent.

These kinds of exercises could inform and refine improvements towards effective PhD supervision in the future in the Netherlands, South Africa and elsewhere.

6

A HOLISTIC APPROACH TO PhD SUPPORT: SUPERVISION, COACHING and MENTORING

6.1 Mentoring and Coaching: Complementary Resources

'Would you tell me, please, which way I ought to go from here?' 'That depends a good deal on where you want to get to,' said the Cat. 'I don't much care where –' said Alice. 'Then it doesn't matter which way you go,' said the Cat.³⁰

6.2 Comparing Supervision, Coaching and Mentoring in Practice

6.2.1 Gaining competence

Supervision of a PhD candidate has been described in terms of models, personality, formal institutional structures and contract agreements. Supervision is often learnt through experience: one's own – from having been supervised, from external examination of theses, from serving on post-graduate committees, from participating in PhD student-presentation sessions, from sitting in on a PhD student's advisory committee, from serving on post-graduate committees, from supervision with a more experienced academic and from supervising different students. Supervision skills are also developed from workshops on supervision and through reading 'how-to' books or research into PhD work. A supervisor also draws on a certain amount of pedagogic content knowledge as well as, of course, discipline content knowledge.

³⁰ Carroll, L. (1922). Alice's Adventures in Wonderland. Macmillan & Co. London. (pp. 91-92)

Coaching, we have tried to show, is a less common process as it involves specific training in skills that are not picked up through experience alone. Coaching is, however, consonant with current research into pedagogy in that it is strongly student-centred, holistic and transdisciplinary. Coaching also promotes independence, reflection and self-directed action – all of which are essential for an emerging researcher. Coaching is usually short-term, formal and goal-oriented, and may involve two people from completely different fields or disciplines. Coaching skills need to be taught and then practiced.

Mentoring, we have claimed, is often long-term, informal and field- and personality-based. While a coaching relationship could be one of equal power, mentoring typically involves an older, more experienced mentor and a student. A good mentor has often himself been mentored well, and therefore understands both the value and process of passing on a lifetime of experience, sharing connections and possibly 'grooming a successor'.

Supervisor	Student	NOTE
'I see your chapter is only 4 pages. You need to send me the complete chapter before we can discuss it. I'll see you two weeks after I receive the draft.'	'I just wanted to show you how far I'd gotten. OK. I'll send it by Friday.'	This is task focussed, formal, time efficient, agreement oriented. Interaction is formal & requires formalised commitment.
Mentor	Student	
'Now I see you only ma- naged to send 4 pages. I suggest you block out one full day a week to write. I manage to keep writing by not answering emails for one day a week. Let me know if you need help in blocking out time.'	'OK. Thanks but I may need to talk about this. It's not really so much the time factor. Maybe you can give me some advice on how to overcome writer's block.'	The mentor in this example talks more, offers advice. Approach is more holistic and takes into account the mentor's own experience and desire to see the stu- dent succeed.
'Yes: don't worry. We all have this problem. I know some- one at the writing centre who will help you. Come, I'll walk you over there and we can get some coffee.'	'Thanks so much.'	

Coach		
'How is the writing going?'	'I only managed to write 4 pages.'	The coach makes no as- sumptions. (Skills of intuition/listening & rephrasing the situation.)
'It sounds like you are discouraged.'	'I am so disappointed. I meant to finish the chapter!'	a repirasing the situation.)
'What got in the way?'	'I seem to just have writer's block. I had plenty of time.'	(Delving & not assuming.)
'What kind of a block is it?'	'I feel paralysed. I know what to say but I can't begin. It's like someone is looking over my shoulder.'	(Using metaphor)
'What does this overseer look like?'	'Like my PhD committee, plus my external examiner, plus my supervisor: a whole grandstand!'	(Use of humour!)
'A whole grandstand! What could you do to get away from centre court while writing?'	'I guess I could write on a practice court where there is no audience!'	Solution comes from student.
'So: some quiet neglected side court where you are free to practice. Would this work to get you started? Before you present an exhibition match!'	'Yes: I like that. I'll see it as a warm-up chapter and spend 3 hours "on court" every morning!'	The interaction in this case is kept positive not moving into problematising any neurosis or difficulty.

6.3 Dialogues from Different Perspectives

In these dialogues we will show differences in the interactions between a student and a supervisor, and a mentor and a coach.

6.4 Integration

While there are many advantages to having a supervisor, separate mentor and a professional coach (for a set period), these roles can be integrated. It may seem logical that supervision, mentoring and coaching relationships are mutually exclusive, and that the approaches, assumptions and skills in supervision, mentoring and coaching are contradictory. However, without being thoroughly schizophrenic, a PhD supervisor could manage to include the three roles interchangeably, drawing on skills from all roles. In this case it is wise to sometimes advise the student: 'Now I will leave the coaching approach and tell you what I would do in this situation.' This situation is illustrated through dialogues between supervisor/coach/mentor/ student below.

Supervisor	Student	NOTE
'Now that you have registered, we need to set up some structures and agreements. Did you manage to go through the contract – Supervisor- Student Agreement?'	'Yes. It looks OK to me. But it says that I have to send you a whole chapter and then wait 2 weeks for feedback.'	Supervision focus (Task oriented; following a proce- dure)
'Should we go through this together and I can help you'	'Yes, thanks.'	Mentoring: (Sho- wing guidance)
'What about what is worrying you?'	'I'm struggling a bit with writing. Could you look at some smaller piece of work in the beginning, just so I know I am on the right track?'	Coaching ap- proach (Finding out more)
'That's fine for now.' 'In our supervision relationship I'll be combining aspects of mentoring and coaching. So you need to say what will work for you.'	'OK, I appreciate that. But what is coaching?'	Integrating three roles
(some explanation)		
'So, for example, what kind of feedback do you want on your writing right now?'	'My English is fine, I think, but I'm not sure of the structure. I need to know that the approach and sequence is OK.'	Coaching ap- proach
'There are some excellent workshops on constructing an argument. Here is the leaflet.'	'Oh, that will be helpful!'	Mentoring focus
'When can I have the first section of the proposal?'	'I'll send 6 pages by Friday.'	Supervision & coaching
'I see your enthusiasm. You have strong motivation.'	'Uhhh? Thank you! Yes,I do.'	Coaching

6.5 Epilogue

Writing a PhD thesis is not a linear process; there is no 'one size fits all'. Pellucid pathways and preset templates may add to systemic efficiency but offer little in terms of intellectual exploration. Doctoral students should be questioning prevalent discourses, contributing controversial – or at least fresh ideas – and not simply complying with throughput requirements. So, of course, self-help/how-to books have their limitations. We have tried here to broaden the opportunities for finding one's own path creatively and reflectively, not for learning the 'rules of the game' but for questioning the 'game' and for becoming more of a person through the process and through connecting with others along the way.

We must also draw on our cultural resources, ensuring awareness of worldviews, and not be overly drawn in to dominant paradigms in the traditional supervision process. The more flexible model suggested here will provide a more nuanced relationship that will draw on the strengths of both individuals and the unique context in which this holistic approach is viewed.

BIBLIOGRAPHY and RECOMMENDED READING

The books, journals and related resources listed below have played an important role in the compilation of this handbook and many have proven to be invaluable in our day-to-day interactions with postgraduate students.

1 Argyris, Chris; Schön, Donald A. (1974) Theory in practice: Increasing professional effectiveness. San Francisco: Jossey Bass. ISBN 0875892302, 9780875892306

'This book is a landmark in two fields. It is a practical guide to the reform of professional education. It is also a beacon to theoretical thinking about human organizations, about their interdependence with the social structure of the professions, and about theory in practice.' -- Journal of Higher Education

2 Badenhorst, Cecile. (2006) The Scribe's Journey. New Voices Publishing, Cape Town, South Africa. ISBN-13: 978-1-920094-30-0

The Scribe's Journey contains over 150 writing exercises. Each one is designed to take you away from the world of to-do lists, priorities and products, and into the realm of possibilities, exploration and colour. The writing activities will tap into your creative source and begin to free your mind from the restrictions and limitations which so often accompany writing tasks. Whether you write reports at work, or poetry, or family histories, this book will help you write with a fresh eye. 3 Barnett, Ronald. (1997) Higher Education: A Critical Business. Buckingham. SHRE/Open University Press. ISBN-0-335-19703-5

Current concepts of critical thinking need to be reconstrued into the much broader concept of 'critical being' and applied to higher education. Under this construct, critical persons (students) become more than just critical thinkers; they engage critically with the world and with themselves; they not only reflect critically on knowledge, but also develop powers of critical self-reflection and critical action. Concurrent with the concept of critical being is a form of social and personal epistemology: the belief that through higher education students can be changed as persons by their experiences.

4 Biggs, John (2003). Teaching for Quality Learning at University. Buckingham: The Society for Research into Higher Education and Open University Press. ISBN 0-335-21168-2

In the days when university classes contained highly selected students, enrolled in their faculty of choice, the traditional lecture and tutorial seemed to work well enough... Through reflective practice, teachers can then create an improved teaching environment suited to their own context.

5 Brockbank, Anne; McGill, Ian. (2006). Facilitating Reflective Learning through Mentoring & Coaching. Kogan Page Ltd. London & Philadelphia. ISBN-13: 978-0749444488

This book is for those who practice mentoring or coaching as well as for those clients who are interested in the mentoring and coaching process.

6 Carson, Richard David. (2003). Taming your gremlin: a surprisingly simple method for getting out of your own way. HarperCollins, New York. ISBN 0060520221, 9780060520229

A completely updated edition of this classic, explaining the author's laid-back but stunningly powerful methods for taming self-defeating behaviour.

- Cryer, Pat. (1997) Handling common dilemmas in supervision.
 SRHE/Times Higher Education Supplement (London) ISBN 10: 0946376026
- 8 Delamont, Sara; Atkinson, Paul; Parry, Odette. (2000) The Doctoral Experience: Success and Failure in Graduate School. London. Falmer Press. ISBN 0750709278
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This practical guide is based on a series of successful workshops on postgraduate supervision and presents the most frequently encountered difficulties in the student/supervisor relationship.

10 Foster, Peter. (1996) Observing Schools: a methodological guide. Sage (London, Chapman) ISBN 185396266X, 9781853962660

Observing Schools discusses the nature and purposes of observational research in schools. It covers the different observational techniques which can be used, and their advantages and disadvantages, bridging the gap between qualitative and quantitative approaches.

11 Costa, Arthur L. (Ed) (2001) Developing Minds: A Resource Book for Teaching Thinking. 3rd Edition. Alexandria, VA: Association for Supervision and Curriculum Development. ISBN-13: 978-0871203793

Developing Minds explores how the teaching of thinking is evolving as we strive to better understand how the brain learns, how to effectively use technology in the classroom and how to focus on assessment of student achievement.

- Jackson, Thomas E. The Art and Craft of 'Gently Socratic' Inquiry
- Johnson, D.W.; Johnson, R.T. Co-operation and Conflict: Effects on Cognition and Metacognition.

- 12 Lave, Jean; Wenger, Etienne. (1991) Situated Learning: legitimate peripheral participation (Learning in Doing: Social, Cognitive and Computational Perspectives). Cambridge UK, Cambridge University Press. ISBN-13: 978-0521423748
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- 14 Leonard, Diana. (2001) A Woman's Guide to Doctoral Studies. Open University Press, Buckingham. ISBN-13: 978-0335202522

This guide is designed to help women undertake and enjoy working for a doctorate as they recognize the rules of the academic game.

15 Mouton, Johann. (2001) How to succeed in your master's and doctoral studies: A South African guide and resource book. Van Schaik Publishers, Pretoria. ISBN: 9780627024849

A resource for students and supervisors alike, the topics covered are related to the management of postgraduate research studies: the development of a successful research proposal (with examples); research resource management; research ethics and more.

16 Murray, Margo. (1991) Beyond the Myths and Magic of Mentoring: How to Facilitate and Effective Mentoring Program. Jossey-Bass, San Francisco. ISBN-13: 978-1555423339

Step-by-step guidelines for putting together cost effective mentoring programs that foster employee learning and growth

- 17 Mathabatha, Ngoanamadima; Sello, Johannes. (2005) The Struggle Over Education in Northern Transvaal: The Case of Catholic Mission Schools, 1948-1994. (Savusa-NiZa Student Publication) Rozenberg Publishers, Amsterdam. ISBN-13: 978-9051701890
- 18 Phillips, Estelle M. & Pugh, D.S. (1994) How to Get a PhD: A Handbook for Students and Their Supervisors. Open University Press; 2nd revised edition. ISBN-13: 978-0335192144

This text is a handbook for PhD students providing a practical, realistic understanding of the processes of doing research for a doctorate. It is an outcome of the authors' blending of systematic rigorous research into doctoral education and considerable practical experience of PhD supervision. It discusses many important issues such as the importance of time management and how to achieve it, and how to overcome the difficulties of communicating with supervisors.

19 Phillips-Jones, Linda. (1982) Mentors and Protégés. Arbor House, New York. ISBN-13: 978-0877954019

How to establish, strengthen and get the most from a mentor/protégé relationship

20 Prosser, Michael; Trigwell, Keith. (1999) Understanding learning and teaching: The experience in higher education. (Society for Research into Higher Education) Open University Press. ISBN-13: 978-0335198313

How can university teachers improve the quality of student learning? Prosser and Trigwell argue that the answer lies in determining how students perceive their unique learning situations.

21 Taylor, Stan; Beasley, Nigel. (2005) A Handbook for Doctoral Supervisors. Routledge. ISBN-13: 978-0415335454

This book focuses on the practical needs of supervisors, drawing examples from a wide range of countries, and uses self-interrogation as a means of encouraging readers to reflect upon their practice, making it an essential read for anyone involved in doctoral supervision.

22 Whitworth, Laura; Kimsey-House, Karen; Kimsey-House, Henry; Standahl, Phillip. (2007). Co-Active Coaching, 2nd Edition: New Skills for Coaching People toward Success in Work and Life. Davies-Black Publishing, California. ISBN-13: 978-0891061984

A newly revised edition of the book that helped define the coaching profession and captures the essence of what it takes to design and maintain successful, collaborative and empowering coaching relationships.

23 Wisker, Gina. (2005) The Good Supervisor: Supervising Postgraduate and Undergraduate Research Doctoral Theses and Dissertations. Palgrave Study Guides, Macmillan. ISBN-13: 978-1403903952

The book is useful for students undertaking research with special focus on research skills development and on supporting students through and beyond the examination process.

Journals And Academic Articles

1 Akerlind, Gerlese S. (2004) A new dimension to understanding university teaching. Teaching in Higher Education, 9(3): 363-376

Abstract: This paper reports the outcomes of a study, undertaken from a phenomenographic perspective, of academics' ways of experiencing or understanding being a university teacher. A range of understandings was found, representing in particular a varying focus on the experience of teaching as a: teacher transmission focused experience; teacher-student relations focused experience; student engagement focused experience; and student learning focused experience. This work builds on previous studies of university teachers' conceptions of teaching. However, the focus taken in this study on the experience of being a teacher, rather than engaging in teaching, has highlighted new aspects of university teaching.

2 Akerlind, Gerlese S. (2007) Constraints on academics' potential for developing as a teacher, *Studies in Higher Education*, 32(1):21-37

Abstract: This study undertook a phenomenographic analysis of academics' ways of approaching their growth and development as a university teacher. The focus of the study is on the meanings and intentions underlying different ways of going about developing as a teacher, and how this relates to the ways in which academics understand the nature of teaching development and being a university teacher. Five different approaches to developing as a university teacher emerged, varying from a focus on building up a better knowledge of one's content area, in order to become

more familiar with what to teach, to continually increasing one's understanding of what works and does not work for students, in order to become more effective in facilitating student learning. The approaches experienced by academics, and the meanings and intentions associated with them, are seen as constituting constraints on their potential for developing as a teacher.

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Abstract: This article reports on an investigation into the variation in how research is experienced by established senior researchers. It provides a new, discipline-neutral, non-technical framework for interpreting how academics are responding to the challenges of the changing context of higher education. The study identified four qualitatively different ways in which research is understood. These are differentiated according to whether they have an external product orientation or an internal process orientation and whether the researchers themselves are in the forefront of their awareness or whether they appear to be incidental to their awareness. In the context of concern about the nature and role of research in the economy and about how it should be funded, and at a time when knowledge is said to be in crisis, the article suggests that the framework can contribute to rational analysis and decision-making.

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Abstract: Proposes that classrooms that encourage critical thinking possess distinguishing features that can assess whether critical thinking is a regular occurrence. Suggests that a critical thinking classroom commonly reflects the following attributes: frequent questions, developmental tension, fascination with the contingency of conclusions and active learning. These attributes reinforce each other to provide developmental stimuli for enhanced critical thinking. 5 Cousin, Glynis; Deepwell, Francis. (2005) Designs for network learning: a communities of practice perspective. *Studies in Higher Education*, 30(1):57-66

Abstract: This article explores the relevance for network learning of themes developed by Wenger, initially with Lave and subsequently alone. While Wenger's fieldwork is located in the workplace, he sees his theorisation on becoming a learner as applicable to any context, be it home, work or formal education. In unravelling the connectedness between learning identity and community, usefulness of Wenger's ideas for the context of networked learning is exposed. First, the specific features of Wenger's notions of participation and reification are explored; and, finally, his design perspective with respect to 'facilities of engagement, imagination and alignment' is presented. The exposition of Wenger's (and Lave's) ideas is interwoven with a discussion of their implications for the field of network learning.

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- 7 Entwistle, Noel. (1997) Introduction: Phenomenography in Higher Education. *Research and Development in Higher Education* 16(2):127-134
- 8 Entwistle, N. (2007) Research into student learning and university teaching, Student Learning and University Teaching. 1-18 British *Journal of Educational Psychology* Monograph Series II. 4
- 9 Ives, Glenice; Rowley, Glenn. (2005) Supervisor selection or allocation and continuity of supervision: PhD students' progress and outcomes. *Studies in Higher Education* 30(5):535-555

Abstract: This article reports part of an Australian longitudinal study which examined the patterns evident in the relationships PhD students and supervisors developed and the ways they worked together. The participants were 21 Ph.D. students and their main supervisors. Data were collected via interviews conducted between 1995 and 1998. Three interviews were conducted separately for each student and supervisor. This report focuses on the allocation of supervisors to students and continuity of supervision in relation to students' progress and satisfaction with supervision. From this small sample it appears students who felt involved in supervisor selection, whose topics were matched with their supervisors' expertise and who developed good interpersonal working relationships with supervisors were more likely to make good progress and be satisfied. This was more likely when supervisors were experienced and senior academics or the student had two active supervisors. Disruptions caused by a temporary change of supervisor created problems and delays. Suggestions to overcome this are made.

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Abstract: Despite a growing body of research about mentoring, definitional, theoretical, and methodological deficiencies reduce the usefulness of existing research. This article provides a critical review of the literature on mentoring, with an emphasis on the links between mentoring and undergraduate academic success. The first section describes a variety of ways in which mentoring has been defined within higher education, management and psychology. Issues related to developing a standard operational definition of mentoring within higher education are discussed. The second section provides a critical review of empirical research about mentoring and undergraduate education. The third section describes four different theoretical perspectives that could be used in future research about mentoring. Finally, future directions for research, including methodological issues and substantive concerns, are addressed.

11 Johnson, W. Brad. (2002) The intentional mentor: Strategies and guidelines for the practice of mentoring. *Professional psychology, research and practice* 33(1): 88-96.

Abstract: How can faculty in professional psychology programs become more intentional and effective mentors? Many psychology graduate students are never mentored, and very few psychologists have ever received training in the practice of mentoring. This article briefly summarizes the nature of mentoring, the prevalence of mentoring in psychology, primary obstacles to mentoring, and some ethical concerns unique to mentoring. The article provides several strategies to enhance mentoring and guidelines for the profession, departments of psychology, and individual psychologists who serve as mentors. This article is designed to help readers take a more deliberate approach to the practice of mentoring.

12 Kamler, Barbara; Thomson, Pat. (2008) The failure of dissertation advice books: Towards alternative pedagogies for doctoral writing. *Educational Researcher* 37(8): 507-514.

Abstract: Anxious doctoral researchers can now call on a proliferation of advice books telling them how to produce their dissertations. This article analyzes some characteristics of this self-help genre, including the ways it produces an expert-novice relationship with readers, reduces dissertation writing to a series of linear steps, reveals hidden rules, and asserts a mix of certainty and fear to position readers 'correctly'. The authors argue for a more complex view of doctoral writing both as text work/identity work and as a discursive social practice. They reject transmission pedagogies that normalize the power-saturated relations of protégé and master, and point to alternate pedagogical approaches that position doctoral researchers as colleagues engaged in a shared, unequal and changing practice.

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15 Pearson, Margot; Brew, Angela. (2002) Research Training and Supervision Development. *Studies in Higher Education* 27(2): 135-150.

Abstract: Research education, or training, as it is often termed, is attracting greater scrutiny as research itself is seen of greater importance in the global knowledge economy. In turn, concerns to improve the effectiveness and efficiency of research supervision are leading to the introduction and extension of programmes for supervisor development. This article presents a framework for an approach to supervisor development, based on the assumption that in order to discuss supervisor development it is important to understand what supervisors do and why. The article examines the nature of the educative process for research students in the current research environment. It articulates the generic processes supervisors need to engage in for effective supervision, if students are to develop in differing institutional, disciplinary and professional contexts the appropriate expertise and attributes for employment, and it presents an outline of what might constitute a flexible professional development programme for supervisors in this context.

16 Pearson, Margot; Kayrooz, Carole. (2004) Enabling critical reflection on research supervisory practice. *International Journal for Academic Development* 9(1): 99-116

Abstract: This paper describes the development of an instrument – The Reflective Supervisor Questionnaire (RSQ). The RSQ maps the domain of research supervisory practice as a facilitative process involving educational tasks and activities. It is designed to assist research supervisors explore, by means of self-reflection and reflection on feedback from others, how they practise supervision. In developing the RSQ 58 items were generated describing 5 hypothesised constructs derived from prior research. The resulting instrument was tested on postgraduate research students in 2 institutions. The questionnaire correlated highly with an established questionnaire supervision scale and with an overall satisfaction measure. Four factors identified in an exploratory analysis closely approximated the hypothesised constructs and

extended the theoretical framework being developed. These 4 factors identified 4 subsets of facilitative supervisory practice: Progressing the Candidature, Mentoring, Coaching the Research Project, and Sponsoring Student Participation in Academic/ Professional Practice. Issues in the interpretation of the findings and the possible usage in academic development programs of an instrument based on them are discussed.

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Abstract: Most research indicating dissonant forms of student learning engagement, leading to problems in the achievement of learning outcomes, is with undergraduates. Action research at Anglia Polytechnic University involving questionnaires, focus groups and supervisory dialogues, conducted with Israeli and British postgraduate students between 1998 and 2001, indicates that dissonance in research seen as a form of learning produces potentially significant difficulties for students at different stages in their work. Websites, Presentations And Other Resources

- 1 Code of Practice for University Degrees. 2000 (Revised 2005). University of Surrey. Available at: http://www.open.mis.surrey.ac.uk/admin/registry/qaeo/codprd. htm
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- 5 The Centre for Right Relationship (2005). Organisational and Relationship Systems Coaching Manual. California.
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APPENDICES

Sanpad and its RCI programme

Anshu Padayachee

Having examined the statistical, demographic and institutional and equity characteristics of the cohort the outputs the research findings were as follows:

- The total cohort number under investigation stands at 191.
- All in all there have been 127 Ph.D.'s confirmed.
- This means that more than 1 in 2 cohorts graduated with a Ph.D. during the period under investigation.
- This also means that in a period of seven years, 16 Ph.D.'s were produced per year.

In terms of social categories the percentages of Ph.D. graduates 21% were African females, 20%, African males, 17% Coloured females 1% Coloured males, 8% Indian females, 2% Indian males, 19% White females and 11.5% White males.

41% of the graduates were African, 19% were coloured, 12.5% were Indian and 30, 5 % were Whites. In terms of gender 65% were females and 35% males.

In terms of years taken to attain the degree 53% achieved it in 3 years, 41% in 4 years and 6% in 5 years. In addition it became evident in the interviews that there were several traits evident in the feelings of respondents towards the Programme.

It was felt that it provided to them:

- A psychological boost
- A "changing of mind" experience
- A "Process" –driven experience
- Building collegial bridges
- The opening of possibilities
- Intellectual stimulation
- Real empowerment

The report that follows pinpoints the considerable achievements of an innovative, even path-breaking programme that is collaborative, transparent and pioneering in its scholastic and research endeavour. The present second follow up report has confirmed the initial conclusion emanating from the initial report that the RCI has been a highly successful SANPAD Project that has been decisive in the effort of establishing a new cohort of researchers who utilised the programme to achieve academic and research excellence.

It is a programme rooted on comprehensive selection criteria and rigorous processes, and the evidence provided in the two reports signifies the programme's importance nationally and regionally and as the new initiatives in a few SADC countries as well as Ethiopia show conclusively.

It is instrumental in the expansion of knowledge production and human capital.

It is very widely accepted that the present system does not produce Ph.D.'s in sufficient numbers and it has been known that only 0,01% of the country's population has a Ph.D. as opposed to 0,1% of Indians who have this qualification.

In term of social categories the percentages of Ph.D. graduates identified was as follows:

-	African females	21%	(22.5%)
-	African males	20%	(15.5%)
-	Coloured females	17%	(17%)
-	Coloured males	1%	(1.4%)
-	Indian females	8%	(8.5%)
-	Indian males	2%	(4.2%)
-	White females	19%	(19.7%)
-	White males	11.5%	(11.3%)

It can be deduced then that:

- 41 % (38% in the first report) of the graduates were African.
- 19 % (18.4% in the first report) were coloured.
- 12.5% were Indian.
- 30, 5 % were Whites.

It can be gauged that in terms of equity the outputs were very encouraging as overall 69% of the graduates were Black in accordance with the equity laws of the country, while 31% were Whites. It can be deduced that innovative, well structured, designed and implemented initiatives such as the RCI can be considered significant in an upward spiral in regard to Ph.D. outputs, especially when stakeholders and role players in the system and processes associated with such efforts have demonstrated over the years a commitment and dedication in their efforts in shaping both the skills , capacity and mental strength that make high level researchers that could be in the short, medium and long term indispensable in the sustainable growth and development of the economy through innovation.

In terms of *gender*:

- 65% (as opposed to 67.7% in the first report) were females.
- 35% (as opposed to 32.3% in the first report) were males.

In terms of years taken to attain the degree:

- 67 (53%) as opposed to 56 (52.8%) in the first report achieved it in 3 years.
- 52 (41%) as opposed to 42(39.6%) in 4 years.
- 8 (or 6% as opposed to 7.6% representing the same number) achieved it in 5 years.

The Committee for Higher Education estimated in 2007 that the average period for a completion of a Ph.D. in South Africa fluctuates between 7-8 years on average. This indicates that the figures produced above can be described as very good.

A psychological boost

There was a feeling that the overall programme provided a psychological boost to a number of cohorts in respect of their future scholastic endeavours.

As one of them said:

"Speaking to a lot of my colleagues at my university I had the feeling that doing a Ph.D. is a lonely exercise, it's you, your supervisor and your research. I felt very differently when I joined the programme. I was not alone with my supervisor, I had a good number of people to talk, exchange ideas, share concerns, facing similar problems as researchers and human beings, and break the isolation. This gave me immense strength and belief in myself. I was not alone".

A "changing of mind" experience

Throughout the programme cohort with clear cut ideas about the topic, questions, methodologies and the like were convinced that changes in the process would be of value.

As one of the cohort elaborated:

"When you deal with a topic you are interested in and love in most cases you feel that your way to do is the best, sometimes the only way. The programme opened my eyes and mind to the real possibilities to the fact that on many occasions it is advisable to make changes, because your own ideas are rigid and will lead you to the wrong path. This means that I was given the opportunity by SANPAD to see my Ph.D. and my own beliefs in a very understanding and convincing way, by opening my eyes to realities that were outside me".

A "Process"-driven experience

There was a general belief that the process followed from Workshop 1 to the last was an eye opener in terms of the process followed throughout with the help and participation of everyone in the group.

As one student said:

"SANPAD was manna from heaven for me. I had registered for a Ph.D. and it was a time of challenge for the proposal to be prepared and accepted. The process followed in the workshops opened my eyes because I realised that it is all in our minds, but the ideas need to follow a process of shaping, planning, knowledge and application. Every workshop was a milestone in the process, testing your ideas, understanding, knowledge, innovation, application and all these things that relate to the proposal. Then there was the participation, the corrections, the debates, the comments This process made me believe in myself and two months later my proposal was accepted by my faculty higher degrees without any suggested changes".

Building collegial bridges

The building of collegial bridges amongst cohort was mentioned by all of them with a feeling of nostalgia.

This is captured adequately in the following response:

"I loved the mixing of my colleagues, the interaction and engagement with students from all over the country. The facilitators were outstanding but what really impressed me at a personal level is how I was treated by my colleagues both inside and outside the workshops. We shared, we laughed and we really cared for each other, and this was a deep feeling I got and it grew on me when I left the place. Then I realised that bonding, sharing and friendship are so important, especially when they are maintained as in our case. Besides the intellectual contribution, the human bonding was very important for all of us.

The opening of possibilities

It became evident that for a good number of the cohort interviewed the opening of possibilities for success became evident, thus replacing lack of belief.

This was expressed by a cohort as follows:

"Before joining SANPAD, working towards my PhD degree was something I saw as impossible, or near impossible. I worked on it in a variety of ways, in different stages, using a number of notebooks. After the first and the second workshop the possibilities became more visible, tangible. The possibilities widened throughout, I was now surer where I was going, my supervisor saw the difference in my drafts. My proposal writing became more coherent, until my proposal was accepted".

Intellectual stimulation

Besides the collegial feelings and togetherness, intellectual stimulation became a part of the process as one interviewee confessed:

"I have learned so much and really felt grateful and privileged that I have been given such an advantage in the process towards intellectual stimulation through important and insightful presentations, discussions and challenges. I learnt a and z of thinking, relating concepts with questions, relationships and even statistics. It helped me immensely as a student and a supervisor. This intellectual stimulation provided me with a great belief in myself. The experience was once in a life time".

Real empowerment

There was a common thread amongst all cohorts that a programme empowered them as academics, researchers and human beings.

As one of the interviewees said:

"The RCI has helped me, been empowered at all levels by providing for me not only with a thorough understanding of methodologies and way of thinking, but also all these relationships underlying the research process such as the conceptual frameworks, the proper formulation of research questions, the objectives, the timing and other details inherent in this exercise and the contingencies embodied in all these steps. The interaction with top researchers and academics in the top of their field and their whole attitude empowered me as a person and a researcher".

Perhaps the most moving tribute to the programme is to be found in a Ph.D. thesis whose author graduated from a top South African University in 2009. The final part of his "Acknowledgements" reads as follows:

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