

THE MANAGEMENT OF THE SELECTION AND SUPERVISION OF POSTGRADUATE RESEARCH STUDENTS IN PUBLIC ADMINISTRATION: FACING DIFFICULT CHALLENGES

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ABSTRACT

The throughput rates of postgraduate research students in Public Administration seem to be relatively low, the drop-out rates very high and the quality of postgraduate research rather poor. In an attempt to address this unfortunate situation, this article focuses on the management of the selection process of prospective postgraduate students as well as the supervision of such students. It is proposed that an admission policy be employed, which provides for a period of grace during which maximum intellectual and technical support can be rendered by a specialist committee to prospective students. This is then followed by an important selection process of appropriate supervisors, to ensure that admitted students and supervisors are well-matched. To further empower the supervisory relationship, a well-managed system of joint supervision is employed to ensure a teamwork approach which promises benefits to both the student and the supervisor.

INTRODUCTION

The tertiary landscape in South Africa has recently changed considerably, due to the amalgamation of some institutions. This has led to the formation of fewer, larger multi-campus universities and a resultant period of turbulence. Despite the turbulence in the tertiary sector, the demand for admission into postgraduate research studies has increased. However, the completion (or the so-called 'throughput') rates of this category of students seems to be relatively low, the drop-out rates very high and the quality of postgraduate research rather poor. This unfortunate state of affairs has begged for a focus on the management of the process of selecting prospective students, as well as supervising them. The growing number of postgraduate research students is

also placing considerable pressure on the human resources available for supervision. In addition, the recruitment of young and inexperienced staff members and the addition of former Technikon staff members (with relatively little or no depth in terms of supervisory experience) to the new comprehensive universities is complicating the process. If it is agreed that postgraduate education is a fundamental component of university life and that postgraduate students are a national resource, then surely care must be taken to ensure that this category of students have the best possible chance of fulfilling their potential and of completing their studies. It is true that many departments and schools of Public Administration and Management have evolved some conventions and practices, however inarticulated, to manage postgraduate research studies, but for many staff members and students the conventions and practices are ineffectual and do not address the challenges directly. This article is therefore an attempt to systematically review the management of the process of selection and supervision of postgraduate research students and the challenges faced in that process, in the light of the recent experiences of the Department of Public Administration and Management at the University of South Africa.

BACKGROUND

Even a cursory survey of the subsidy policy of the Department of Education (DoE) makes it clear that successful postgraduate students are an important source of subsidy to universities. This is a reality in spite of the fact that Public Administration as an academic discipline finds itself at the lowest level (funding group one) of funding from government. It is a world-wide reality that large numbers of postgraduate students never complete their studies (Mouton 2001:6). There is also world-wide concern about the quality of postgraduate training, the long periods of time it takes students to complete their studies, the high percentage of masters and doctoral students who terminate their studies after one year of registration and the poor progression from honours to masters and doctoral studies. Mouton (2001:6) identifies a number of serious obstacles faced by postgraduate students during their studies. The one that stands out for the purpose of this article, is the methodological difficulties students encounter, such as inadequate knowledge of research methodologies and poor or inappropriate levels of research skills. It is the view of Mouton (2001:6) that many masters and doctoral students did not have the benefit of any prior formal training in research, have forgotten their earlier training, or have received incomplete or inappropriate training.

SELECTION OF PROSPECTIVE POSTGRADUATE RESEARCH STUDENTS

The selection of postgraduate students is an important departmental function and needs to be carried out in a systematic fashion. All academic departments are eager to admit students who have the potential to succeed in completing their research and writing their dissertations or theses to the required standard within the minimum period of time (Phillips 1994: 128). But the overeager acceptance of postgraduate

students may have great risks for the quality and quantity of postgraduate throughput. There is nothing more frustrating than devoting time and energy to a research student who fails to respond, to gather data, to analyse the data, to do the write-up and to submit draft chapters. To pour all that intellectual energy and emotional commitment into a student who drops out in two, three or four years' time is one of the most discouraging experiences in the life of an academic.

Admission to postgraduate studies

It is generally accepted that the two basic entrance requirements in the selection process are that the student must be in possession of the **basic entrance academic qualification**, i.e. an honours degree (to register for master's) or master's degree (to register for doctoral studies) and that an **acceptable research proposal** on a suitable topic must have been submitted. The latter requirement is essential, but has the potential to complicate the selection process. The execution of the selection process usually manifests itself in two options. Option one prescribes that no new postgraduate student be accepted without an acceptable research proposal. Option two considers the research proposal to be more suited towards the upgrading decision (for a second year of registration) once the student has been working towards his/her research degree for a year. The academic record of the student in the undergraduate degree or honours degree is taken into consideration, but an average pass rate is not necessarily seen as a limiting factor, as it has been established that there is no correlation between the successful completion of a research degree and a good pass rate in terms of undergraduate modules (Phillips 1994: 128). At the risk of oversimplifying the issue, it may be contended that brilliance at undergraduate level is never a substitute for perseverance at the research degree level.

Option one: The provisional registration policy

The biggest challenge to the selection process has been the problems flowing from option one. This option, which leads to what is known as 'provisional registration', has become less used because of its rather unfavourable consequences for both the student and the university. If a student meets the minimum requirement in terms of the basic entrance academic qualification, provisional registration is granted on condition that the student submits an acceptable research proposal on a suitable topic within a reasonable time. In practice, it may take anything from three to six months or even a year or longer for a student to finally get registered. The onus is now on the student to produce an acceptable research proposal without the assistance of a supervisor, since a supervisor is only appointed once the student has formally been registered with an acceptable research proposal on a suitable topic. The provisional registration has the added negative consequence that it does not give the student access to the university library. Only registered students may apply for a library card which gives them access to the library and the services of the subject librarian. A second negative consequence is the fact that because the student is not yet formally registered, he/she may find it difficult to secure a loan or grant to fund his/her

studies. This provisional status may then drag on for a year or two before the registration is finally approved. Experience has taught that the majority of such students disappear before registration is secured, and the majority of them after only one year of provisional registration. A negative consequence to the university is that provisional registration generally does not earn any subsidy from the Department of Education, because such students have not been formally admitted to the university.

Option two: The alternative admission policy

The struggle of students with the task of compiling an acceptable research proposal with a view to being registered, has led to the introduction of option two. This alternative admission policy was born out of an attempt to overcome the challenges mentioned above without departing from the two essential admission requirements. Option two admits the student to postgraduate studies on the basis that the student has the minimum entrance qualification, i.e. an honours or masters degree in Public Administration. However, this registration is valid for only one academic year, during which the student must produce an acceptable research proposal on a suitable topic to be allowed to register for the second academic year. It has the advantage that it provides students with the opportunity to register for a specific postgraduate degree and to produce acceptable research proposals within the first year of registration. The student therefore has a year's grace, as it were, in which to develop such proposals so that they comply with an acceptable academic standard. During this period, students will have full access to all library facilities including the services of the subject librarian. In the UNISA case, this is a knowledgeable person who will, on request, compile a provisional bibliography of available information on all aspects of the particular topic. The importance of having the privilege of being able to obtain professional assistance from a subject librarian and other information providers in developing research students' specific literary research skills cannot be underestimated (Buttery, Richter & Filho 2005: 18).

Re-registration for the qualification is conditional, on the basis that an acceptable research proposal on a suitable topic should be produced within the first year of registration. It is never easy to refuse a student who has already done some work on his/her research, but if the research work has proved to be of an unacceptable standard, then it is fairer to both parties to do so.

RESEARCH DESIGN PHASE OF POSTGRADUATE RESEARCH STUDENTS

The need to implement this alternative admission policy, led to the development of a procedure geared towards guiding students through this critical phase of research preparation. In essence, a departmental higher degrees committee is used to evaluate research proposals and to give constructive feedback to students. However, the committee is faced with several challenges in this critical phase, such as having to deal with inadequate research proposals from students – the result of limited research skills on the part of those students.

Capacity constraints in terms of the number of experienced lecturing staff, who can serve as supervisors, is another challenge.

The departmental higher degree committee

A departmental higher degree committee has been established, consisting of experienced and senior staff in the department, to evaluate individual proposals that are submitted, to approve suitable topics and to appoint supervisors once the proposal and topic has been finalized. The committee is made up of colleagues who have a genuine interest and feel for postgraduate supervision. Concerns about each proposal is discussed in this forum, after which decisions are taken about the way forward. It may be that a proposal is seen to be appropriate and of an adequate standard, in which case supervisors/promoters can be appointed immediately and the student is allowed to proceed with his/her studies. A decision may be taken to refer the proposal back to the student with extensive comments on how to develop it further. In some cases, the committee may make proposals on alternative ways of approaching the research to make it a more viable study. However, the committee may consider it as an added function to monitor the progress of students (done on an annual basis to decide on re-registration of students for the following year), to oversee the quality of research degree supervision and coordinate any other research degree matters.

As mentioned earlier, a major challenge to the higher degree committee is that the contents of research proposals are generally not of an acceptable standard. It is then the committee's task to assist students in developing their proposals during the year's grace, so that they can comply with an acceptable academic standard. It needs to be mentioned that, upon registration, students are provided with a departmental brochure with extensive guidelines on how to compile a research proposal. In spite of the availability of this brochure and the many handbooks with a similar intention, students generally seem to possess limited research skills. Generally students will have basic research skills or knowledge, acquired from doing undergraduate and/or postgraduate research methodology modules. However, the gap between gaining theoretical knowledge and the practical implementation of this knowledge seems to be too wide. Thus, the transition from honours studies to research-based masters studies or from tutored master's studies to research-based doctoral studies seems to be incomplete. Some students may have obtained their preceding qualifications from another university where research methodology was not part of the curriculum. Another observation is that students attempt to compile the research proposal – no trivial task! – without doing any significant amount of research on the topic of their choice.

In practice, it may happen that students are allowed to resubmit an improved version of their research proposals on several occasions during the year's grace and with the assistance of the higher degrees committee make considerable progress towards the development of an acceptable research proposal on a suitable topic. As soon as a student manages to secure the approval of the committee, the immediate involvement of the higher degrees committee comes to an end. At this stage the formalities of handing the student over to

suitable supervisors/promoters and the registering of a suitable topic for the student's studies commences. But what are the general characteristics of a suitable topic?

Selection of a suitable topic

In practice there are no ideal topics but some are more suitable to particular students and in particular circumstances. A topic should match the capabilities and interests of the student (Botha & Engelbrecht 1992:37). For example, a student with a strong inclination towards descriptive research should hesitate before choosing a topic which involves complex analyses, even though such a topic may otherwise be a good topic. It is always helpful if students can be allowed to work in an area of personal interest. Students should select a topic which they find intellectually stimulating and which has the potential to sustain their interest for a number of years. This will ensure that students are excited and enthusiastic about their topics.

There must be a clear and justified need (practical feasibility) for research on the topic. The scope of the research should preferably be kept small. The more closely the subject matter can be defined the better the chances of success in the time available.

The choice of a topic is that of the student. The departmental higher degrees committee does not consider it as its function to provide suitable topics to prospective students, as a topic which does not embody the student's own ideas may not maintain his/her interest and motivation. However, it is realised that not all students are able to clearly demarcate their area of research and formulate a suitable topic. The committee, therefore, does have a mentoring role in assisting in the delimitation task of focussing the topic. The mentoring role is aimed at ensuring that the student formulates a topic which is suitable for research training, which promises new insights and which can be completed within reasonable time (Moses 1984:164). This is a time-consuming task which is of the utmost importance in order to prevent the prospective student from setting out on a false trail. This is also an important task because students almost always choose a topic which is too broad and ambitious. It rarely happens that a student will already have a well-defined topic when applying for registration. Generally, the initial topic is almost always poorly defined, too general, and too extensive in scope. To delineate a broad topic into a focussed topic (within a limited scope) the student will have to read widely without losing the focus of the research question that was chosen. Even then it will require several iterations before the topic is refined and an acceptable research proposal can be developed. This does not mean that the topic is then cast in stone, as re-definition usually goes on throughout the research project.

Formulation of an acceptable research proposal

What is needed to formulate an acceptable research proposal? It is clear that some knowledge, skills and research experience are needed before an acceptable research proposal can be compiled (Buttery, Richter & Filho 2005: 9). What is actually required are the following skills: the ability to translate amorphous situations into manageable

problems and the ability to formulate hypothetical solutions and then to test and validate or reject the proposed solutions. One has to realize that there are substantial differences in the writing practice between undergraduate (compilation of assignments) and postgraduate (compilation of a dissertation/thesis) writing, and that students cannot be expected to adjust without any problems. The result is that many students will have completed their undergraduate qualification without having been well-equipped with the appropriate knowledge, skills and experience required for doing postgraduate research (Kaunda & Low 1998: 130). How this capacity is then developed in students to enable them to cope with the demands of postgraduate research work? One option is through formal training in research. Formal training can be attained by doing modules in research methodology and/or the philosophy of science (De Young & Perlman 1984: 63; Phillips 1985:29). A more informal option is to do a non-formal course in research proposal writing. Both these options are available at most South African universities. Another option is to provide students with a brochure which contains step by step guidelines on how to compile a research proposal and to refer the students to some of the numerous books which have the same intention.

It is common for many postgraduate students to lack confidence in their writing skills and academic ability with the result that they are bound to experience some difficulty in coordinating their thoughts into a coherent whole (Kruger & van Niekerk 1991: 111; Phillips 1985: 30). They then tend to just jump in and write a research proposal from the top of their heads. Experience has shown that the opposite approach is needed. Students need to read as much as possible about the identified topic before the proposal is formulated in words. The more thought the student put into his/her proposal, the better developed, organized and logical it will be. The thinking of the student can only be organized and structured if he/she has consulted the most recent, credible and relevant scholarship in his/her area of interest.

Appointment of supervisors

An important departmental responsibility is the development and implementation of adequate criteria for the selection and appointment of supervisors/promoters to ensure that students and supervisors are carefully matched. To fully appreciate the importance of this responsibility, one has to consider the question asked by Mouton (2001:11): "What are the signs of an efficient and well-managed postgraduate programme or academic department?" His answer? "Top academic departments usually have the best research output and are highly rated by their peers because of their research reputation." Mouton goes on to declare that the best supervisors are usually found in these top academic departments. His argument is based on the assumption that good supervisors are, more often than not, also good scholars. Other writers concur with this view when they suggest that the competence of a good supervisor lies in the area of expertise in research (Fraser & Mathews 1999: 5; Welsh 1978: 79-80). Although students often select a university because of the individual reputation of a particular supervisor, they more often select a particular university to further their postgraduate studies because of the reputation of the academic

department at that university. The efficient and effective management of this activity on departmental level are therefore of crucial importance.

Students sometimes indicate a preference in terms of whom they would like to have as supervisor. In general, however, students do not select their supervisors. The supervisors are allocated by the departmental higher degree committee or, in a few cases; the supervisors may have selected particular students. The ideal supervisor is believed to have a good track record as a scholar in a particular field of expertise, is experienced in supervisory practices and has a favourable recent throughput rate of students who have completed their studies. Unfortunately the top scholars are very often overcommitted and may not have adequate time for supervision. Similarly, those who are the most experienced and who have a good reputation as a supervisor may attract large numbers of postgraduate students, which could, in turn, leave less than adequate time to devote to individual students.

The choice of a supervisor for a particular study will then have to be balanced out by factors such as the current work load of lecturers, their area of specialization (i.e. compatibility with a student at the level of common research interests), experience as a supervisor, track record in terms of delivering successful postgraduate students, the issue of gender, and the compatibility of the personalities of the student and the supervisor. The latter factor is very important, because good communication between students and their supervisors is essential. Students and supervisors need to be well-matched in order to avoid direct clashes of styles, personalities and attitudes. If interpersonal compatibility is missing, being a postgraduate student may become a very negative experience (Phillips & Pugh 1994:10). A survey done among postgraduate students in Britain to determine their satisfaction with supervision has revealed that the majority of students put a high premium on the supervisor's ability to relate well to his/her students (Welsh 1978:81). Another factor which needs to be considered with sensitivity is a discrepancy in male/female staffing ratios, especially at senior level, in many Public Administration and Management departments in South Africa. At many universities the possibility of a female student working with a female supervisor remains relatively low. It is not simplistically suggested that same-sex (or even same-race) student-supervisor relationships are always preferable, but only that sensitivity needs to prevail when it is clear that students are likely to experience difficulty in future to obtain emotional support from a supervisor of the opposite sex (or race) in times of stress (Delamont, Atkinson & Parry 1997: 183-185; Leder 1995: 6). Where there are serious personality conflicts and disagreements about the topic, method or theoretical position between student and supervisor, a change of supervisor may be considered. However, a change of supervisor will only be approved in exceptional circumstances.

Supervisors are appointed to assist students throughout their study periods and this results in the abovementioned challenge of capacity constraints in terms of experienced supervisors/promoters, which problem is the result of the continuous loss of experienced staff (due to retirement or resignation) and the influx of new and less experienced staff and needs intervention on two levels. On the one hand, a need exists to cultivate supervisory skills of less experienced staff (grow the timber) through joint supervision, and on the other, to provide supervision of a high standard (quality supervision) to students.

Joint supervision

The effort of growing one's own timber entails appointing a supervisor and a joint supervisor for each student. Supervision is a teaching activity and academic staff traditionally learn how to teach, not through training, but from their own experience as students and as lecturers (Zuber-Skerritt & Ryan 1994: 26). However, for supervisors to be fully effective and efficient at this task, some training is required. In an effort to develop supervisory skills, a less experienced staff member will be appointed as joint supervisor with a more experienced lecturer, who will act as supervisor. In a sense this is a supervisor training scheme where a member of staff learns how to supervise (in addition to the supervisory training programmes offered by almost all universities) by teaming an inexperienced supervisor with a more experienced colleague. These results in the important development of more junior staff that may have recently completed their own post-graduate studies but do not yet have experience of supervising postgraduate students. In the day and age of tutored masters degrees (with no dissertation component), the practice of joint supervision provides a means of introducing lecturers without a research degree to the process of research degree supervision. Joint supervision as a means of extending the pool of experienced supervisors cannot be underestimated. This is a far cry from previous practices where supervisors were mainly left to learn the art of supervision by trial and error (Hockey 1995: 207).

In addition, pairing experienced supervisors with colleagues of less experience allows for greater expertise because lecturers with different areas of expertise (mostly complementary sources of expertise) work together to provide the best quality of supervision to students by combining their expertise. Different lecturers bring different skills and styles of supervision to the supervisory task, which may supplement the product of supervision to the student. For instance, one supervisor may be strong on the particular methodology followed in the study (craft knowledge), while the other may be an expert in the particular field of study (disciplinary knowledge). This means that the student gets the benefit of both knowledge components, which provides an opportunity for both experienced and inexperienced supervisors to learn from each other. In many instances of joint supervision the junior member of staff has the expert disciplinary knowledge and the senior, more experienced supervisor, the craft knowledge. However, it may also happen that the more experienced supervisor may have both the disciplinary and craft knowledge. The respective roles of senior and junior staff member will then be that of mentor and apprentice.

Joint supervision allows for a second opinion when the advice of a supervisor needs to be checked by the student. In such cases it is helpful to have the support of a second supervisor. It is also possible that the supervisor will make bolder suggestions to the student if he/she knows that it will be subject to the scrutiny of the second supervisor (Bourner & Hughes 1991:22). An added advantage is that the danger of dependence on one person and the possibility of personality clashes are minimized.

The additional advantage of having two supervisors to each student is that it ensures continuity in circumstances of staff mobility or staff absences. When one supervisor is not available for some reason (being on leave) the other can continue the supervisory

task with no interruption to the student. It may also happen that one of the supervisors leave the service of the university. Replacement of a supervisor can be very disruptive to a student's research programme, because a new supervisor may have significantly different views. This blow is usually softened by the fact that at least one supervisor will still be available for support and continuity.

Another significant element of the system is that it allows for the supervisor to be supervised. If a student receives inadequate supervision in a situation of individual supervision (which is often fraught with the danger of misunderstanding), only the student will be aware of it, and he/she is not in a position to do much about the situation. In a system of joint supervision, supervisors monitor each other. Lapses of supervisors who fail to read and comment on draft chapters are more visible and consequently less likely to occur.

The above approaches all serve to lead to a higher quality end product. If managed adequately, this system can contribute to the quality of the supervisory relationship, which is a key factor in the successful completion of postgraduate research dissertations and theses.

But the system may produce some pitfalls, which can be avoided if managed properly. The supervisor will assume the leadership duty as the first supervisor (i.e. the main supervisor) and will have more responsibility (i.e. the prime responsibility) than the joint supervisor, who will act as second supervisor (i.e. the support supervisor) with a support duty (Phillips & Pugh 1994:110). If this arrangement is not understood by the supervisors, the likelihood of a fragmentation of responsibility is real in the sense that each supervisor will regard the other as taking the lead and this will most certainly reduce the commitment of both supervisors (Bourner & Hughes 1991:21). The compatibility of the personalities of the two supervisors is also an issue to consider. If not, conflicting supervisors may use the student as an instrument to score points off each other in their own power struggles. In order to avoid conflicting advice to the student, it is imperative that both supervisors work on the same copy of each draft chapter submitted by the student, both supervisors attend meetings with the student at the same time, and both supervisors sign each letter or communication to the student. If this *modus operandi* is not followed, the student may well play one supervisor off against the other.

A well-managed system of joint supervision is one that is designed to capitalize on the benefits of its jointness while attempting to avoid or minimize its disadvantages. In doing so, the benefits of the system clearly outweigh the disadvantages.

Quality supervision

The quality of supervision is one of the main factors which influence the quality of masters dissertations and doctoral theses and the ability of students to complete their studies on time (Hockey 1995:199). However, the successful completion of postgraduate studies is also dependent on factors such as the student's personality, motivation, perseverance, and family and financial (work) circumstances (Burnett 1999: 46; Willcoxson 1994: 157). The reasons for non-completion of postgraduate studies are often more related to feelings of isolation, the feeling that nobody is interested, and that of being overwhelmed with

information, rather than the student actually lacking ability (Phillips 1985: 31). The key to the appropriate academic assistance is to be found in quality supervision.

How, then, do we cultivate quality supervision?

Quality research breeds quality supervision. Quality supervision is more often than not attained through the influence of the concept of leading by example. The fact that a supervisor is an enthusiastic and successful practitioner of research and is seen to be so, is a very important input into the successful completion of a thesis by a student. Students who experience their supervisors as being very involved in non-research activities like teaching, administration, consultancy and non-formal training at the expense of doing research, very soon come to devalue their own research work and are less likely to complete their studies (Phillips & Pugh 1994:185).

The system of **joint supervision** results in quality supervision. If we believe that two heads are better than one, then clearly two supervisors are likely to embody more expertise than one. The teamwork approach of joint supervision has the added benefit that even experienced supervisors can learn from each other, which in the end enhances the quality of the supervision. Thus, the potential of staff development through joint supervision is equally true for experienced and inexperienced staff members.

Institutional support has an impact on the quality of postgraduate supervision when it signals the importance of postgraduate studies to its staff, students and academic departments. This implies support in terms of quality assurance mechanisms such as adequate administrative procedures, training for supervisors, guidelines for supervision, as well as adequate resources to academic departments and rewards for successful supervision (Moses 1994:6).

Quality supervision can only come to fruition when there is an appropriate *departmental culture*. There seems to be a favourable postgraduate student throughput in departments where students are regarded as a priority in terms of intellectual and emotional support (Hockey 1995:204).

CONCLUSION

One way of establishing a flourishing postgraduate research degree programme is to have a positive research culture in an academic department. In addition, the postgraduate research degree programme needs to be well-managed in terms of known procedures. To work towards the achievement of this ideal, it is proposed that an admission policy be employed that provides for a period of grace during which maximum intellectual and technical support can be rendered to prospective students by a specialist committee. This is then followed by an important selection process of appropriate supervisors to ensure that admitted students and supervisors are well-matched. To further empower the supervisory relationship, a well-managed system of joint supervision is employed to ensure a teamwork approach which promises benefits to both the student and supervisors. It is clear from the above that much can be done at organisational (i.e. departmental and institutional) and individual (i.e. supervisory) level to improve the management of postgraduate research studies. If implemented and managed properly,

these suggestions have the potential to ensure an increased throughput of quality postgraduate research output.

Knowledge of the admission policy and the procedure, geared towards guiding students through the research design phase, provide a framework in which students can make an informed choice and in which supervisors can ascertain whether they can supervise a particular student adequately. However, one has to be realistic, because research supervision is not the sole factor impacting on postgraduate research outcomes. The relationship between making quality supervision possible and a positive postgraduate student throughput is not always a linear one. A high completion rate does not necessarily imply quality supervision, because some students succeed despite poor supervision. Although this may sound like a contradiction to the whole argument for improved supervisory practices, it must now be clear that the quest for improved throughput rates is not always a simplistic matter to which obvious solutions can be offered.

BIBLIOGRAPHY

- Botha, E. & J. Engelbrecht (Eds.). 1992. *Succeed at dissertation*. Halfway House: Orion Publishers.
- Bourner, T. & M. Hughes. 1991. Joint supervision of research degrees: second thoughts. *Higher Education Review*, 24(1), Autumn.
- Burgess, R.G. (Ed). 1994. *Postgraduate education and training in the social sciences*. London: Jessica Kingsley Publishers.
- Burnett, P.C. 1999. The supervision of doctoral dissertations using a collaborative cohort model. *Counsellor Education and Supervision*, 39(1), September.
- Buttery, E.A., Richter, E.M. & W.L. Filho. An overview of the elements that influence efficiency in postgraduate supervisory practice arrangements. *International Journal of Educational Management*, 19(1).
- Delamont, S., Atkinson, P. & O. Parry. 1997. *Supervising the PhD: a guide to success*. Buckingham: Open University Press.
- De Young, T. & B.J. Perlman. 1984. Teaching research methodology in Public Administration. *Teaching Political Science*, 11(2).
- Fraser, R. & A. Mathews. 1999. An evaluation of the desirable characteristics of a supervisor. *Australian Universities' Review*, 42(1).
- Hockey, J. 1995. Getting too close: a problem and possible solution in social science PhD supervision. *British Journal of Guidance and Counselling*, 23(2).
- Kaunda, L. & T. Low. 1998. Growing our own timber: students and supervisors' perceptions of research at honours level at the University of Cape Town. *South African Journal of Higher Education*, 12(3).
- Kruger, E.G. & L. Van Niekerk. 1991. Accompanying research students. *South African Journal of Higher Education*, 5(1).
- Leder, G.C. 1995. Higher degree research supervision: a question of balance. *Australian Universities' Review*, 38(2).

- Moses, I. 1984. Supervision of higher degree students: problem areas and possible solutions. *Higher Education Research and Development*, 3(2).
- Moses, I. 1994. Planning for quality in graduate studies. In Zuber-Skerritt, O. & Y. Ryan (eds.). 1994. *Quality in postgraduate education*. London: Kogan Page.
- Mouton, J. 2001. *How to succeed in your master's and doctoral studies*. Pretoria: van Schaik Publishers.
- Phillips, E.M. 1985. Supervising postgraduates at a distance. *Teaching at a distance*, 26, Autumn.
- Phillips, E.M. 1994. Quality in the PhD: points at which quality may be assessed. In Burgess, R.G. (ed). 1994. *Postgraduate education and training in the social sciences*. London: Jessica Kingsley Publishers.
- Phillips, E.M. & D.S. Pugh, 1994. *How to get a PhD: a handbook for students and their supervisors*. Second edition, Buckingham: Open University Press.
- Welsh, J. 1978. The supervision of postgraduate research students. *Research in Education*, (19).
- Willcoxson, L. 1994. Postgraduate supervision practices: strategies for development and change. *Higher Education Research and Development*, 13(2).
- Zuber-Skerritt, O. & Y. Ryan (eds.). 1994. *Quality in postgraduate education*. London: Kogan Page.