

SUPPORTING EDUCATIONAL RESEARCHERS OF THE FUTURE

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Introduction

The quality of postgraduate supervision across all disciplines in our universities has been a concern for a number of years. These concerns have ranged through issues of standards, dissatisfaction by postgraduate students, confusion about the desired outcomes from postgraduate study, inadequate training for supervisors, poor completion rates and inadequate resources. While one recent focus of criticism has been the general cost effectiveness of the PhD (Campus Review 1994), there have been reports which have specifically singled out disciplines such as arts, social sciences, humanities and education for their poor rates of completion in doctoral studies (Dunkerley & Weeks 1994; NBEET 1989; Whittle 1992). In Australia, these disciplines have been contrasted with the sciences and applied sciences highlighting longer completion times and higher attrition rates for students in the non-science disciplines (NBEET 1989). In the United Kingdom, concern over doctoral studies in the social sciences led the Economic and Social Research Council (ESRC) to introduce sanctions for universities with low completion rates for their doctoral candidates and now similar procedures are being introduced in Australia. The difficulties experienced by postgraduate research students and supervisors within the social sciences have also been targeted by ESRC research funding in an effort to find strategies which ensure more satisfied students and more rapid completion of doctoral work (Burgess 1994).

Although there are arguments against using completion rates as a indication of quality in postgraduate supervision, such arguments are unlikely to gain much support in these times of financial restraint. Similarly, although there are many important differences between postgraduate students and their research within social sciences and postgraduate students and their research in the pure or applied

sciences, comparisons of cost effectiveness and completion rates are probably inevitable. There are indications that the particular contexts associated with postgraduate research in the non-science fields need further attention and explanation.

Such a climate of concern led to a submission in 1993 to the Australian Committee for the Advancement of University Teaching for funding for a project which would attempt to investigate and enhance the postgraduate experiences for research students in a Faculty of Education. The university from which the submission originated had recently expanded its postgraduate intake in the Faculty of Education and there were concerns about sustaining consistency and quality in postgraduate supervision especially as less experienced supervisors were called upon to take some of the supervision load. The submission listed the aims

of the project as:

Forming a collaborative project group of supervisors and students involved in postgraduate research programs in the Faculty of Education;
Undertaking a collaborative process in which members of the group would investigate aspects of postgraduate learning, implement strategies to improve learning, monitor the effects of those strategies and discuss their experiences within the group setting;

Producing written materials and video segments which would be used to enhance postgraduate student learning throughout the Faculty and in other settings; and

Documenting the collaborative process used by the group, together with its strengths and weaknesses, so that other groups could use the process to improve postgraduate student learning.

In April 1994, a group of 16 interested staff and research students from the Faculty of Education met to begin their involvement in the project. The group held meetings every three weeks or so to discuss concerns about postgraduate supervision, share ideas to address those concerns and relate their own experiences of supervision. The meetings were supplemented by individual interviews and discussions with the Project Officer who documented much of the individual and group discussion about supervision with a view to recording the understandings gained. In the latter part of the project, video segments were prepared which captured some examples of different stages of supervisory meetings and also some interviews with supervisors and students. The interviews and videos expanded the total pool of students and supervisors involved in the project to approximately 25. The students varied in their courses of study, some being doctoral students while others were involved in masters programs with varying thesis requirements. Some were part-time while others were full-time. The supervisors ranged from relatively inexperienced to others with a number of years experience. The following analysis arises from the issues discussed particularly by the student members of the group. While not providing an exhaustive analysis of all issues discussed, the analysis does focus on some recurring themes within the discussions. Excerpts from the student input to the discussions will be used to

illustrate the points made and to provide some authenticity to the perspectives of the students. This will be followed by a discussion which attempts to place these issues within a framework and then suggests some strategies for addressing some of the concerns raised.

Postgraduate Supervision - A New Experience

A recurring theme among the postgraduate students of the group was that supervision and postgraduate research were new experiences for which they did not feel at all well prepared. Many drew contrasts between undergraduate study or even postgraduate coursework and the experience of postgraduate research. They perceived an abrupt transition between these two very different forms of study. The contrasts which were drawn related to the degree of structure provided, the sense of isolation experienced, the resources available for assistance and the changes in power relationships.

Degree of Structure Provided

A number of students reflected that they perceived little guidance and direction in their coursework aimed towards preparing them for their research projects and, as a result, they reported feeling very much in the dark about what they should be doing as postgraduate research students. Although they acknowledged that a degree of autonomy and independence was required for their research work, they were critical that this expectation had come very suddenly without preparation or assistance to help them feel comfortable with what was a new approach to their study.

There is no ritual; there is no initiation process.

At the undergraduate level, there is a ritual or ceremony to begin and a structured progression from start to finish, with periodic 'carrots'

or 'sticks' along the way together with being part of a large and visible undergraduate culture. At the end, there is a completion ceremony and a 'going into the world'. The postgraduate research student comes from the outside world into a framework that has no ritual, structure, immediately tangible academic companionship or support, nor a visible culture, no defined space or place. At the end is simply the goal of completing the research study, a thesis.

The research experience of producing a thesis is a journey, and it's a journey which is in part spiritual, a growing experience. It is also an experience which you haven't had before. What is needed is a map. When you come into the postgraduate system there is a certain mystical or mystifying connotation to doing postgraduate work. The mystification can be misused, creating a separation.

Some of the students commented that the coursework subjects in their program had not been a good preparation for the thesis component as they did not always encourage application of concepts and methods to the research project. They had perceived their coursework at the masters level to be more like undergraduate study in which time was structured, with deadlines and heavy assessment loads. For these students, it was a case of getting through each subject with little time for looking towards their longer-term aims or planning a research

project.

From my point of view, in the course that I've been enrolled in, there has been so much coursework that it's hard to remember that I've actually got a thesis in terms of time and also thinking and energy. One student suggested that preparation for a research project should begin in undergraduate courses.

For those students who intend to go on to postgraduate research studies, such students need to take on independent study opportunities in their final year of undergraduate studies where possible. I think that the development of individual research studies in undergraduate years is a bonus to faculty research profiles in the promotion and recording of a student research base.

Those students who found the transition into postgraduate research less stressful were those who had begun planning their research projects well in advance.

Fortunately, I began thinking about my research topic at the beginning of 1993, even though I did not begin supervision till 1994. Probably a student who is going to do a proposal must start thinking about what is to be done earlier, much earlier. They need to realise this early.

A Sense of Isolation

Another contrast drawn by many students between postgraduate research work and other types of study at postgraduate or undergraduate levels was the sense of isolation they were experiencing.

I have felt an acute lack of research sharing and peer contact. The concrete barriers to producing the written product were almost insurmountable, approaching the stage where I felt like giving up, if something didn't give.

This sense of isolation manifested itself as a lack of contact with peers as well as the absence of a place to gather. Several students articulated the value of learning in a supportive community atmosphere although they were not experiencing this themselves.

Being able to talk to other students and try out what I think is really important to me. It's not necessary that we are doing the same sort of research or have the same ideas, but I need someone I can easily discuss with some of the little bits of the ideas and thoughts that I have, so I can get an idea whether what I am saying is making sense. And it's not possible to do that with a supervisor. I have tried to take in all the books and keep my mind on what I want to say to the supervisor, but by the time I get there, it just goes out of my head and the moment is lost where it is meaningful.

Ultimately when it comes to writing a thesis and moving through the

changes in conceptualising that occur in supervision, it is important to keep in mind that understanding comes with internalising what is being learned. This requires reflection and interaction with others. As a result of discussion of these concerns within the project, one student set about establishing a regular meeting of postgraduate students at which they could informally share concerns and discuss their progress. This provided some students with a way of overcoming

some of their perceptions of isolation.

I scheduled a venue and a time for postgraduate students to meet on Friday 27th May, and the group has continued since then every week on a Friday afternoon. At the first meeting there were eight students and at subsequent meetings about three to five students have attended. This has been a wonderful opportunity to keep me on track and to listen to and share with others our ideas about what we are doing. Everyone has the chance to speak and we can explore the different issues that arise through discussion. People don't always have the same ideas, but it is a chance for students to try out on others what they have to say. Another student formed a small group which could share ideas in a reflective way.

I discovered that the solution could perhaps be through establishing a mini reflective team, something I had heard members of staff talk about in relation to teaching. A reflective team with one or two other students would involve sharing ideas about work and progress made. Another student set about gaining access to a postgraduate room which gave a sense of belonging and some contact with other students. In my case, something did 'give' in the guise of access to a research students' room where I could settle to complete my task. Finding a place where I might sit in peace, without interruption, and occasional contact with other students, was half the battle of continual effort over.

Students commented on the value of the forms of interaction established during the project.

Having a chance to talk to other students about what I'm doing has helped me orientate myself and it keeps me on track in between seeing my supervisor.

Resources Available for Assistance

Again in contrast to their previous studies, some of the postgraduate students commented that the transition to undertaking a research project with one or two supervisors had been associated with a reduction in the resources they could call upon for support and assistance. In the specialised field of their research, they felt less able to discuss their work with fellow students, a common practice among all levels of coursework students who have a sense of being part of a cohort and are undergoing similar experiences, focusing on similar academic tasks. Furthermore, being tied to one or two supervisors meant that the students were unsure about their relationship with other academics in the faculty and in other universities. The students often felt reluctant to call upon other academics in the faculty for assistance and were also unaware of those academics most likely to be able to help them.

Students need to know where to go for support or resources that they need. There might be specific people or pieces of information within the faculty as a starting point to getting the assistance they need. Suggestions to overcome these shortcomings included compiling a register of faculty expertise. This would not only give students information about the resources available to them but also provide some legitimacy to requests for assistance from others within the faculty.

Another suggestion was to formalise the assistance and resources available among students themselves.

As a way of increasing human resources in the faculty, for example, students might make themselves available, for a fee if necessary, to assist students in learning the basic use of computer programs used in

thesis writing.

Changes in Power Relationships

One of the most difficult aspects of transition into postgraduate research reported by the group was the tension involved in the relationship between supervisor and student. Most students recognised that they were expected to take more responsibility for their own learning and to develop a sense of ownership of their research project.

In some cases, this led to resentment that the supervisor was taking too much of a leading role in the relationship and not giving the student sufficient independence.

Who is the boss of the project can be a main issue. I have known students who have had problems where the supervisor takes over too much in the guise of trying to be helpful.

The process of supervision and thesis writing has been clear for me. I like independence and I want my supervisor to trust me, that I know something, that I can do things alone.

On the other hand, some students felt they were left too much on their own and were not given sufficient direction and guidance. It was obvious that there was delicate balance between a supervisor providing too much direction and too little support. Furthermore, this desired balance varied with each student and at different times within the research process.

Because topic formulation is initially vague, the maintenance of student independence in formulation and freedom to develop the topic can result in a creative and innovative study if the supervisor does not control the process by imposing topics or opinions.

What I need is a supervisor to provide a safe structure within which I can work. That they could help me when I was exploring the wrong direction, give me guidance and not be bossy.

Independence to pursue study at one's own rate and to have the confidence of the supervisor who understands that some flexibility is important.

At first, I just wanted to do the study myself. I just wanted to be left alone and get on with it. It possibly would have been more helpful to me if my supervisor had been a lot more directive.

One student acknowledged the difficulties for research students simultaneously undertaking coursework study which was associated with power relationships more like undergraduate study. The coursework component was seen by this student as preventing a transition to a more equal power relationship.

When you're constantly doing coursework, it's hard. It's a whole year that I've been a graduate, but I'm still in this over-under power relationship with people assessing me and marking me and not actually

talking to me.

This same student perceived true postgraduate work to be less tied to assessment and more encouraging of individual directions.

[In postgraduate work] it is quality of your work that matters rather than just being assessed. The quality of your individual work matters more. It allows you that scope to be creative and be individual, to go where you want to go.

As the postgraduate students became more aware of their position and role within the faculty, they sought to be treated as junior colleagues of academic staff. They commented on a growing sense of gradually fulfilling an important role within the faculty as they gained command of the discipline and became more aware of educational research and associated issues. If this evolving status was not afforded to them, they quickly grew resentful.

There needs to be a general appearance of a willingness to have postgraduates in the faculty. Postgraduates aren't invited into the faculty. They are there under sufferance. They don't necessarily contribute, so in a sense they are a bit of a burden, they take up time and space. And that is an uneasy feeling to have, that impression you

get. And the only way to get around that is for people to say, "You're welcome".

When you walk in you just see this door saying "Staff only". At another institution, for example, students used to mix freely with staff in the common-room.

Discussion

The comments made by postgraduate students within this project may not necessarily be representative of all postgraduate students, although they raise similar issues to those reported in other studies (Hill, Acker & Black 1994; Hockey 1994; Powles 1988). A number of themes emerged from discussions among this group and there is enough consistency with other studies to make some tentative links between the perceptions held by these students of their postgraduate research experience and the long completion rates observed for such students on an Australian and international basis. The contrasts drawn by these students between postgraduate research and their undergraduate or postgraduate coursework experiences suggest that postgraduate research has a number of distinctive characteristics. These characteristics include an emphasis on independent work, the development of expertise in a specialist area, the requirement for original and creative thought, changed power relationships with faculty staff and a different rhythm to life and study. Although these features characterise postgraduate research in all disciplines to some extent, they may present particular difficulties for postgraduate students in education and similar fields. Movement into postgraduate research in education from undergraduate study or postgraduate coursework study can and should be seen as a transition into a new and different phase of study for which students require assistance and support.

When compared with undergraduate study, postgraduate research brings

with it an expectation of greater student initiative and independence. Studies which compare expectations within science-related disciplines and non-science disciplines suggest that supervisors in the latter areas have very strong feelings about student independence. For example Parry and Hayden (1994), in their comparison of postgraduate supervision in a number of disciplines, have commented on the conscious effort made by supervisors in the humanities fields to place the onus of responsibility for the development and expression of ideas and insights with the student. It is not surprising that, in fields such as education which value independent thought, creative ideas and critical analysis of traditional views, supervisors would be reluctant to force particular perspectives on to their students, instead expecting them to take a critical and sceptical approach to much of what they are reading and hearing. According to Parry and Hayden (1994), this often translates into a 'sink or swim' approach in which students unable or unwilling to make their own way are left to 'fall by the way'. In their study, they found supervisors generally sought not to interfere with students' work or actively lead their thinking, believing that students who could not cope on their own should not continue. This 'sink or swim' approach, although emanating from a certain belief of supervisors about the nature of research and inquiry in their discipline, is consistent with the feelings of a lack of direction and support reported by postgraduate students in education in the project outlined in this paper.

Postgraduate research is also characterised by an expectation of a growing expertise within a discipline and a sense of mastery of a specialist area within that discipline. For students in science-related fields, this often occurs through membership of a large and sometimes externally funded project team (Whittle 1992). Postgraduate students in science are more likely to be full-time and to undertake a small, well-defined component of a large and well-validated research study. Publications during the period of postgraduate study are common. In contrast, Parry and Hayden (1994) have observed that

research students in the non-science related areas are less likely to be working on externally funded projects and are less likely to publish during their postgraduate years of study. They are also more likely to be part-time students. This has a number of implications for postgraduate students within the humanities, education and social sciences. One obvious implication is that specialisation has the potential to lead to feelings of personal, intellectual and professional isolation (Hockey 1994). Students in education, for example, rarely work in project teams and often collect data related to a specific professional context away from the university. Students pursue in depth a topic of interest to them and, for many students of education, this means a research problem related to their own professional careers outside the university. There is a tendency for students to develop a feeling that their research has little in common with other students who are perceived as not necessarily understanding

the particular nature of the research or its context. Added to this is the increased likelihood that students in education will be part-time, visiting the university for short periods of time to meet with one or two supervisors and use library facilities. Thus, these postgraduate students may have few contacts with other postgraduate students or with academics other than their one or two supervisors, unless specific steps are taken to foster such contacts.

According to Parry and Hayden (1994), the tendency for students in fields such as education not to publish from their research work as they progress through it leads to students depending more on their supervisors to provide feedback and validation of their work. In contrast for science students, publication and membership of a research team provide this validation of their work. For students in non-science fields who do not receive validation from a supervisor, the experience can obviously be very uncertain and threatening. In education and similar fields, the pressure to become expert in a specialist field, combined with limited feedback and a sense of isolation, may readily lead to growing self-doubts about ability and progress. Early in the research project this may manifest itself as a reluctance to settle on a research topic or question not only because of doubts about ability to carry out the project associated with such a topic but also because choice of an area in which to specialise has such long-term career consequences. Later in the research project, doubts about ability may bring major changes in direction as well as delays in writing and completion.

Another distinctive characteristic of postgraduate research is the pressure to produce creative and original ideas. Although there is some disagreement among academics about the exact nature of the original thinking required and more importantly how that thinking is fostered among students, there is nevertheless an expectation that evidence of original thinking should accompany postgraduate research, particularly at the doctoral level (Moses 1992). For many students in fields such as education, this is a very different expectation from that which they experience in their undergraduate study.

Significantly, not only is it a very explicit expectation but students are given little concrete guidance about how to achieve it. Although postgraduate students and supervisors would agree that collaborative efforts often assist creativity and critical thinking, such collaboration does not necessarily characterise postgraduate research in education.

Postgraduate research is also marked by changes in power relationships with academic staff. As students progress through their research projects they are usually expected to assume a more collegial relationship with their supervisors and with other academics in the discipline, with postgraduate research forming the rite of passage into the academic discipline. The ease with which this transition is made depends on the expectations of both students and supervisors, as well

as the overall culture of the faculty (Powles 1992). In some

faculties, postgraduate students are treated as members of staff, sharing facilities, attending meetings and participating in the academic and social activities of the group (Elton & Pope 1992). For other groups and individuals, the transition is slower because the facilities, the culture and the attitudes of students and staff present barriers to collegial relationships. Sometimes these are not deliberate barriers but rather ones which arise because there are no conscious efforts to discuss the nature of postgraduate research, see it as an induction process into the academic culture and then plan for specific strategies to facilitate this induction process. For faculties of education in which postgraduate research supervision is a new and rapidly growing responsibility, the culture needed to foster research in staff and students is only just developing. In some of these faculties, the enthusiasm to enrol postgraduate students has outstripped the adjustments needed to accommodate the new relationships, responsibilities and resources required for postgraduate supervision. Time is an essential ingredient in clarifying roles and expectations, developing infrastructure, policy and procedures, building skills in students and supervisors and providing adequate facilities for postgraduate students.

Finally, another distinctive feature of all postgraduate research is the rhythm of work with which it is associated (Brown & Atkins 1988). Unlike coursework in which programs for study are specified in advance, assessment items set and short-term deadlines externally imposed, postgraduate research is characterised by a relatively long, amorphous period of time after which there is some outcome expected. Most goals are self-imposed or negotiated between supervisor and student, with the nature of the outcomes for each stage much more nebulous than for coursework study. Moreover, the yearly rhythm is different, without the end-of-term and end-of-year rituals which normally mark and celebrate progress through particular phases in courses. Postgraduate students need assistance to incorporate new rhythms into their work, ones which give a sense of achievement along the way and ones which divide the nebulous and long-term tasks of completing a postgraduate research project into tangible, manageable segments of work. Although this feature characterises postgraduate research in all fields, the more isolated nature of postgraduate study in fields such as education means that students find adjustments to new rhythms more difficult to make. In faculties of education which lack a long history of postgraduate research supervision and a therefore a large critical mass of informed and experienced research students and supervisors, there are few opportunities for new students to appreciate these sometimes subtle features of postgraduate research study. Time will be needed for this type of knowledge to become sufficiently incorporated into the way of life within the faculty and consequently passed on to new students and supervisors as the accumulated wisdom of the faculty. Thus, postgraduate research has a number of distinctive characteristics which make it very different from typical undergraduate or postgraduate coursework study. Moreover, postgraduate research in education has the potential to be a less collegial and more troublesome experience for

postgraduate students than for those in other disciplines. Once this potentially problematic nature of the postgraduate experience in education is recognised, there is a need to challenge the common assumptions, firstly, that postgraduate research students (and sometimes supervisors) understand the nature of the process they are entering and, secondly, that they will automatically make the required adjustments to move easily through the process. Instead, movement into postgraduate research should be seen as a transition into a new, different and sometimes very difficult phase of study, with the need for appropriate assistance to be given in order for students to understand what is required to negotiate successfully this transition

and with the need for adequate support to be provided to make the journey a rewarding one.

Conclusion

Just like the transition of adolescents moving towards accepting the responsibility and independence associated with adulthood, the transition into postgraduate research in education is often a time of conflict, uncertainty and self-doubt. Students associate this transition from undergraduate to postgraduate study with feelings of isolation and a lack of clarity of direction with an uneasy balance between being given sufficient independence while still receiving adequate support.

Unlike the more common experience of adolescence, postgraduate students in education often find themselves facing their journey alone, without the opportunity to discuss their experiences and their tribulations openly with their fellow students or with their supervisors. They therefore encounter an even greater sense of uncertainty as they enter a process about which they know very little and about which very little is openly discussed. Rather than opening up the process for dialogue and scrutiny, supervisors (particularly those for whom postgraduate supervision is a new responsibility) tend to assume a greater understanding on the part of postgraduate students than they actually possess at least in the initial stages. In this sense, postgraduate students may find themselves moving blindly through a process of which there are many expectations but few instructions or guides. This is an argument to treat the transition from undergraduate study to postgraduate research in education as a process within its own right, one that deserves discussion, scrutiny, support and planned strategies to achieve the desired outcomes for its participants.

As with any transition process, there is a need to provide both formal and informal orientation or induction procedures for students moving into postgraduate research in education. These should include the provision of information about administrative procedures and resources, a discussion and clarification of expectations of both students and supervisors, the establishment of support networks among students and a welcome that demonstrates a genuine desire to include postgraduate students within the research culture of the faculty. Such formal

one-off induction processes need to be supplemented by ongoing processes which provide students with information, support and a sense of belonging on a continuing basis. In other words, the needs of induction are not fulfilled only by a formal ceremony at the beginning of enrolment. Faculties, individual supervisors and continuing students must take some responsibility for the on-going well-being of all postgraduate students in the faculty.

These strategies rely on a sense of openness about postgraduate research which is not always evident among supervisors. Students frequently complain about being uncertain about what is expected of them and how they are to proceed because supervisors take for granted that students have an understanding of the postgraduate research process. For many students, supervision and postgraduate research remain a bundle of mysteries waiting to be discovered in an ad hoc, trial and error process which is fraught with uncertainty and stress. Being told that their anxiety is 'normal' is little consolation. What postgraduate students desire is a process over which they have some control, through collaborative participation based on their own understanding and appreciation of the process they are undertaking. This requires up-front, frank and open discussion of postgraduate research and the supervisory process.

Clearly, supervisors play an important role in opening up the supervision and research process to scrutiny and discussion. However, such strategies cannot be achieved by supervisors working with their research students in isolation from their colleagues and from other

structures within the faculty and the university. This isolation would merely serve to perpetuate the mysteries of postgraduate research. Rather, the faculty as a whole, which includes all academic staff and postgraduate students at various stages of their research, must take some responsibility for the quality of the experiences of its postgraduate students. Collaborative efforts within faculties of education are required to provide the range of resources and the sense of belonging which contribute to a positive postgraduate research experience and outcome.

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