

Building local leadership for research education : Final report 2014

AUTHOR(S)

David Boud, A Brew, R Dowling, M Kiley, J Malfroy, J McKenzie, N Solomon, K Ryland

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Building local leadership for research education

Final Report 2014

University of Technology, Sydney

The Australian National University

Macquarie University

Professor David Boud (Project Leader)
Professor Angela Brew
Professor Robyn Dowling
Dr Margaret Kiley
Associate Professor Janne Malfroy
Associate Professor Jo McKenzie
Professor Nicky Solomon
Dr Kevin Ryland (Project Manager)

www.first.edu.au

THE AUSTRALIAN NATIONAL UNIVERSITY

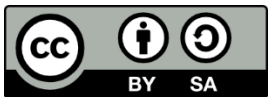
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Office for Learning and Teaching

Department of Education

GPO Box 9880,

Location code N255EL10

Sydney NSW 2001

<learningandteaching@education.gov.au>

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Report written by Professor David Boud, Dr Kevin Ryland and Professor Angela Brew, Professor Robyn Dowling, Dr Margaret Kiley, Associate Professor Janne Malfroy, Associate Professor Jo McKenzie, Professor Nicky Solomon

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List of acronyms used

ALTC	Australian Learning and Teaching Council Ltd.
DDoGS	Deans and Directors of Graduate Studies
ERA	Excellence in Research for Australia
fIRST	for Improving Research Supervision Training
HDR	Higher Degree by Research
ICVF	Integrated Competing Values Framework
OLT	Office for Learning and Teaching
REC	Research Education Coordinator

Executive summary

This project focused on the needs of the group of university staff involved in the coordination and leadership of research degrees within schools and faculties. These staff members are commonly known by a wide variety of names, including Higher Degree by Research (HDR) or postgraduate coordinators. Due to the diversity of terminology used in practice, the project adopted the new term 'research education coordinator' (REC) to describe the role of the personnel involved, and 'research education coordination' to describe their work. A previous Australian Learning and Teaching Council project 'Building Research Supervision and Training across Australian Universities' (Hammond, et al., 2010) had identified leadership in research education as being of great importance in ensuring timely outcomes and enhancing the student experience, but noted that it had not been given much attention. The role of RECs had been generally ignored.

This project examined the roles undertaken by those in local leadership in research education and identified their needs through interviews and through a needs-analysis survey administered in four universities (The Australian National University, Macquarie University, the University of Technology, Sydney and the University of Western Sydney). Through processes of consultation and iteration with RECs and others in key roles in research education (in faculties and university graduate schools), a series of resources based on seven typical scenarios faced by RECs were developed to address these needs.

Regional workshops were convened in four capital cities (Sydney, Melbourne, Perth and Brisbane) to consult further with RECs and to trial and disseminate materials developed. For the most important need identified (creating a research community/culture for HDR students), the project investigated where good practices might be found and developed four extended case studies of how such cultures had been established across faculties and within research strengths, drawing on the ideas of experienced coordinators and their senior colleagues.

The resulting resources to aid leadership in research education coordination were then produced in a web-accessible form and made publicly available through the well-known website of the fIRST Consortium of Australian and New Zealand Universities (www.first.edu.au), supported by the Deans and Directors of Graduate Studies (DDoGS).

While these resources were a major and planned project outcome and deliverable, other outcomes identified in the original proposal—as well as some that were not—have proved to be of importance. The first of these was the mapping, clarification and conceptualisation of the REC role. It was found that there was a wide variation in the expectations and responsibilities of different coordinators, and that these varied across, and particularly within, universities. In many instances a lack of basic role description and ambiguities in reporting relationships were identified.

The project thus investigated the scope of coordination and developed a sample job description that could be adapted for local use. From this a scholarly paper was also produced for an international journal—'The coordination role in research education:

emerging understandings and dilemmas for leadership'—which focuses on clarifying the role (reproduced as Appendix 7).

A further outcome from the project, which was not anticipated related to the activities of the project acting as an intervention into research education that has helped form the coordination practices within it. In this way, the project did not simply enhance existing leadership practice, but created new ways of looking at the practice itself and helped form the identities of those involved by enabling them to see what they do from a wider perspective. The terminology of 'REC', which was introduced as a new term in the first regional workshop, was initially seen as alien but was being increasingly used as a standard expression by the third and fourth workshops. It was also adopted at meetings of the DDoGs as a useful framing of the practice. Unexpectedly, the processes undertaken to identify the facets of the coordination role helped shape what was included within coordinator positions as they were taken up by individual RECs and by universities themselves.

In light of the results of the project and the issues identified, the following recommendations are made:

Recommendation directed to all universities via the Deans and Directors of Graduate Studies to Deputy Vice-Chancellors' Research and Deputy Vice-Chancellors' Teaching and Learning.

1. That Universities clarify the roles and positions of those undertaking research education coordination responsibilities and recognise the leadership dimensions of such positions. This should include *inter alia* the scope of their role, their formal and informal reporting relationships, both within their own department/school/faculty and with the university graduate school or equivalent, workload recognition and links with research centres and similar entities.

Recommendation directed to the Quality in Postgraduate Research conference, which is currently sponsoring new networks in different areas of research education and the OLT.

2. That support and opportunities for RECs to meet across institutions continues to be provided. A national network for research education coordinators should be established as a point of contact for sharing information and ideas and communicating developments. A regular space within the program should be established at the bi-annual Quality in Postgraduate Research conference.

Recommendation directed to fIRST and DDoGS.

3. That a common location for REC resources and development activities is maintained on a continuing basis at fIRST (www.first.edu.au) with advertised access for both newly-appointed and continuing RECs.

Recommendation directed to DDoGs and the OLT.

4. Taking into account the findings from this study and the later OLT-funded projects: '*I've done a Coursework Masters, now I'd like to do a Doctorate: Can I?*' and '*Coursework in Australian Doctoral education: What's happening, why and future directions'*, that

consideration is given to the relationships between proposed research education coursework and structured programs and the role of RECs, so that sufficient and appropriate support and integration be provided at local levels for centrally-initiated programs.

5. That ideas and resources for Associate Deans, Research are provided to support the work of research education coordinators and to raise their awareness of what effective coordination involves and how it relates to both research and research education priorities.

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1 Introduction

This project set out to address the needs of local leaders in research education, most commonly known as Higher Degree by Research (HDR) or postgraduate coordinators. This group carries the main burden of responsibility at a disciplinary level for ensuring a high quality experience for students enrolled in research higher degrees—Masters by research and Doctorates. The project team identified that the roles being performed by these colleagues were becoming increasingly significant in research education, were not well understood, and had not been previously addressed by other ALTC or OLT projects.

Leadership in research education as a whole is an area that has not generally received a great deal of attention. This was identified in a previous ALTC project—'Building Research Supervision and Training across Australian Universities'—as a knowledge gap that was inhibiting the effectiveness of research education and the student experience. The context of research education, with its multiple paths of accountability and responsibility shared between schools, departments, faculties and central graduate schools, makes leadership a complex issue, which needs to encompass not only formal leadership but, more critically, informal leadership. At most levels of leadership in research education there exist tensions between the expectations of others, responsibility for outcomes, and a lack of authority to directly address them. Indeed, it was identified in the Building Research Supervision project that those who found themselves in the position of a HDR or postgraduate coordinator particularly at the school or department level, felt isolated and unsupported.

This project set out to:

- Improve the capacity for RECs to see themselves as leaders in research education and engage in leadership of research education at the local level. This will lead to improved capacity to develop and implement changes in research education, including research supervision and supervisor development, and improved research education for research students through more extensive and fully articulated programs within schools and faculties.
- Improve institutional awareness of the role of research education academics and their needs for leadership development.
- Develop conceptual and material resources to support the outcomes above.

One of the important early findings of the project, which came to frame all that followed, was the recognition of the great diversity of titles used to describe these positions, for example, HDR coordinator, postgraduate coordinator, postgraduate convenor, HDR director, etc. It proved impossible to send any communication using only one of these terms without many in the target group thinking that we were not referring to what they did.

It was therefore decided to use a new, standardised term 'research degree coordination' and the title of 'research education coordinator' (REC) to cover all of these roles and responsibilities, and it is these terms that will be used throughout the rest of this report. We have been gratified to find that over the past two years these terms have been increasingly adopted locally and nationally to describe this collection of roles and responsibilities, and that there has been a willingness by those who hold one of the many other titles to also identify themselves as a REC.

2 Background

Before considering the role of those who lead locally in research education, it is necessary to locate their work in a very rapidly changing scene in research education, both nationally and internationally. This area is under scrutiny as never before and there have been substantial innovations in structure, organisation and forms of practice in this area.

Significant challenges and changes occurring in research education have had a direct impact on the nature of research degrees, their form, supervision and leadership (Boud & Lee, 2009). These changes are partly the result of its growth and diversification away from the 'traditional' PhD, with its predominant emphasis on one-to-one supervision, together with a growing understanding of the importance of the relationship between research education and Australian innovation and economic development.

A key challenge confronting government, professions, industry and the higher education sector relates to the need for Australia to support a high-skills, high-value economy, and the need for skilled researchers for the realisation of this vision. This has been accompanied by policies and strategies focused on increasing the number of HDR graduates in order to meet workforce demands (DIISR, 2009; 2010).

Of relevance to this project is the diversity in the professional and educational backgrounds of HDR students (Ryland, 2007) as well as the increasing diversity of career trajectories, as employment of HDR graduates includes, but goes beyond, university positions.

The ALTC project 'Building Research Supervision Training across Australian Universities' (Hammond, et al., 2010) found that there were continuing challenges arising from the higher expectations from government to increase research degree completions, which flowed through both to supervisors and those who manage them.

There are two resulting foci in research education. Firstly, research study is about advancing knowledge in a field and thereby contributing to a research community. Secondly, research education is about the development of researcher attributes (Bastalicj et al., 2010). As a consequence of the recognition that research education must form researchers rather than just produce research, there has been a trend toward the increased formalisation and professionalisation of research higher degrees (Halse & Malfroy, 2010). The supervision of research students is becoming more visible, transparent and accountable (Manathunga, 2005). No longer can research education be seen as the sole domain of the student and a single supervisor, but it rather involves many others (Cumming, 2007). In addition, the notion that students can effectively learn to research through a singular approach, such as the apprenticeship model, is no longer viable. Rather, a new range of learning and teaching approaches has been recognised as required, most of which focus on the experience of the research students beyond their direct interaction with supervisors, including new forms of program, new kinds of output and new ways of framing the doctoral (or Masters) journey. Thus, there are growing demands on the role of supervision and learning in research education.

Influence is exerted at various levels in research education. The central units responsible (university graduate schools) have become well established and their strategic and

procedural leadership roles accepted in many institutions. Research supervisors provide leadership to students and this has been a growing area of study (McWilliam, 2002; Pearson & Brew, 2002; Vilkinas, 2002). The third important level of leadership, albeit one that is less well recognised and understood, lies between research supervisors and the central entity responsible for research education. Most universities have a designated position at the faculty, school or departmental level that is responsible to varying degrees for research education. However, there is considerable variation between universities, and indeed faculties, in the ways in which these positions are conceived. In some universities, these roles are viewed as primarily administrative, for example, in organising the allocation of students to supervisors and overseeing examination arrangements. Whereas in others they are seen as having an academic focus, with responsibilities for running structured doctoral programs, developing supervisory capacity, and developing a culture for research students. However, few institutions explicitly see these as leadership roles. Similarly, many staff who find themselves in this kind of leadership role, like others in mid-level informal leadership positions, may not see themselves as leaders but rather as administrators or managers (de Boer & Goedegebuure, 2009).

The leadership roles and practices of RECs are developing rapidly as research education changes. Previously, relatively little was known about these roles and how they might vary across disciplines and institutional contexts. The project therefore drew on the growing body of work on leadership for course coordinators, who are at similar middle levels and face similar distributed leadership challenges. The project includes a version of the Integrated Competing Values Framework (ICVF), adapted for the research education coordinator context (Vilkinas & Cartan, 2006; Vilkinas et al., 2009) from an organisational management framework for the roles of course coordinators. Vilkinas (2002) also used an early version of this framework to describe the roles of research supervisors. The ICVF includes the roles of Innovator, Broker, Deliverer/Monitor, Developer (of people) and Integrator (a role that includes selection and integration of the other roles and reflective learning), describing these roles in relation to internal/external and task-/people-oriented dimensions of leadership.

New roles in the management and leadership of research education have emerged and are still emerging. A major challenge is for academics responsible for research degrees within faculties to see themselves as leaders of research education rather than simply as processors of applications and allocators of supervision.

3 Approach and methodology

3.1 Introduction

The project started by focusing on the existing practices of research education coordination in each of the partner organisations. Who were the RECs, how were they positioned and managed, and what issues did they report facing? This initial orientation proved very illuminating. Rarely within an institution was there consistency of role or reporting relationship across different schools and faculties. RECs saw their work as valuable, but unrecognised. They reported considerable difficulties in getting things done because of ambiguities in reporting relationships and few links with other RECs. For example, incumbents may be appointed by and responsible to a head of school or dean of a faculty with whom they have little or no relationship in their work in research education. Where university graduate schools were in existence, RECs often had no formal link to them despite the university-wide role of the graduate school in fostering research education. As the project broadened to other institutions, the same phenomena were reported elsewhere.

The approach used can be summarised as follows: following meetings within institutions, a sample of RECs in the four partner universities were interviewed in depth to discover what they did and how they saw themselves. This was followed by a needs analysis survey to identify what RECs saw as their most important needs. From this data, problems and issues were identified which were then built into scenarios that formed the basis of resources that were used to address key issues such as dealing with conflicts between supervisors and students. For the areas of greatest need, case studies of successful practice were created based on interviews with experienced practitioners. Supplementary information was collected from experienced RECs to add to these resources. Finally, starting mid-way through the project time-line, regional workshops to trial resources and engage RECs more widely across Australia were convened.

3.2 Institutional meetings

At an early stage, the project team thought that it would be valuable to bring RECs within an institution together to support each other and engage in development and leadership activities. Despite efforts in each location, these activities were only commenced in two places and they proved impossible to sustain despite a strong desire by the RECs for what was being offered. This gave us an important insight into what was and was not possible. The conflicting demands on RECs and what they often saw as the unrecognised status of their role were significant considerations that shaped the way the project was conducted.

3.3 Interviews with RECs

Seventeen semi-structured one hour interviews with RECs in the partner institutions were carried out to broaden the understanding of REC leadership roles and effective leadership practices at the local level and to define categories of leadership roles. The ICVF categories (Vilkinas & Cartan, 2006), leadership issues identified by Hammond et al. (2010) and research on the professional work of supervisors were used as triggers for the interviews.

The interview findings were used to adapt the ICVF framework for REC leadership, and to develop illustrative case examples of how RECs enact their leadership roles.

3.4 Needs analysis

A needs analysis was carried out across the four institutions using a number of approaches to ensure a wide range of responses. The team compiled a list of needs based on the data from the interviews and the RECs were asked to rank these in terms of both their importance to their role and also the degree to which they would like help with them. At two institutions the needs analysis was carried out at the end of that institution's RECs meeting and at the other two institutions the data was collected via an online survey.

3.5 Development of resources

As an outcome of the above activities, the project team developed resources that supported the identified needs for capability building for RECs. Some resources were designed for leadership capability building for RECs and some to support RECs directly in their work in leading change and addressing new research education needs at the local level. Together they portray and provide assistance for a wide range of issues confronted by RECs.

3.6 Regional workshops

Four state-based regional workshops were run for RECs and others responsible for doctoral supervision (e.g., academic development and graduate school staff). The purpose of the workshops was three-fold: to enable RECs to meet each other and explore their roles together; to provide the opportunity to disseminate the leadership capability building activities and resources developed in the project; and to initially test the resources. Participants also provided feedback on the resources and their usefulness for other institutions. Following the workshops, the resources were modified and final versions were placed on the flRST website (www.first.edu.au).

The workshops were organised in Sydney (hosted by the University of Technology, Sydney), Melbourne (hosted by RMIT University), Perth (hosted by Edith Cowan University) and Brisbane (hosted by Griffith University). They were full-day events and each had a keynote speaker from the host state (a deputy vice-chancellor, dean of a university graduate school or similar). The workshops were designed to allow as much interaction as possible between participants while at the same time provide useful background material on development in research education and the findings of the project.

4 Project outcomes

4.1 Introduction

During the life of the project, its context has shifted. Initially, the project met with somewhat underdeveloped, diverse and reserved reactions to the need for change. However, by its completion, the notion of local leadership in research education was embraced by most of those in the role of an REC with whom the project had made contact with. This has meant that the project has both reacted to and anticipated change.

The initial outcome was the development of a vocabulary that could consistently name the practice with which we were dealing. It was identified from the start that research education coordination was the field of attention and thus the name 'research education coordinator' should be the name of the role(s) that constituted the object of focus. This led to the need to conceptualise and map what this role involved and how it was positioned institutionally and in research education.

The needs of those occupying this role were then analysed and this subsequently led to the project proposing and developing a range of resources. The project operated on two fronts: the production of scenarios and associated activities that were trialled at regional workshops, and the production of case studies of actual practice focused on the highest-rated needs of RECs identified in the needs analysis. Although, initially the regional workshops were seen as opportunities to test and disseminate these resources, they also became the main forum for articulating the role of the research education coordinator, the language associated with the role, and the positioning of it within the wider national and international context. Indeed they went further than this in that they helped to develop the identity of those occupying such positions.

4.2 Conceptual frameworks for local leaders in research education

One of the major outcomes of the project was the development of existing conceptual models to describe the dimensions of the REC role. This came about through, firstly, the adaption of the ICVF and its specifications to the context of research education coordination and, secondly, through the use of notions of distributed leadership, which helped in clarifying the RECs' relationships of influence. And, thirdly, through the development of new conceptual frameworks to specify the range of activities in which RECs engage and their key influences.

4.2.1 Application of the ICVF

The project initially adapted the IVCF model (introduced in Section 2) to describe the leadership functions required of RECs, drawing on the leadership issues described by Hammond et al. (2010) and the outcome of the interviews on leadership practice undertaken with RECs. Unlike for other contexts (e.g., course and subject coordination), in which most ICVF roles are contained within one position and thus one person, in research education the ICVF roles are distributed across different personnel. As they are often distributed differently in different faculties within the same university, this ambiguity

continues to plague developments in this area, a point which will be taken up in our recommendations. The project therefore focused on the collaborative activities of research education within and across departments and research groups where the responsibility for enriching the quality of the research education experience is shared.

4.2.2 Distributed leadership

The second framework we used was that of distributed leadership (Gronn, 2000; Bolden, Petrov & Gosling, 2009; Gosling, Bolden & Petrov, 2009; Lumby, 2009). The notion of informal leaders occupying roles of influence and possessing the ability to introduce change is brought to the fore in distributed leadership (Gosling, Bolden & Petrov, 2009; Lumby, 2009}. This notion was very helpful in communicating the idea that no matter what the formal structural and hierarchical arrangements, each person could exert influence (i.e., leadership) within the scope of their role, whatever that might be.

In addition, while the importance of mid-level leadership in institutional change has been recognised (de Boer & Goedegebuure, 2009), it is often under-acknowledged in institutional settings, particularly where there is no obvious structure linking different levels of leadership (Gronn, 2009). Middle-level leadership is critical in that it can either aid or obstruct the introduction of change in institutions. It has also been recognised that mid-level leadership can be a source of change within an institution (de Boer & Goedegebuure, 2009).

The outcome from the use of this framework was paradoxical. The notion of 'leadership as influencing' was widely accepted. The RECs could see that what they did was part of distributed leadership and the focus on influencing rather than leading per se was helpful in aligning the work of the project with the ways in which the RECs identified themselves. However, we did not find it useful in actively framing directions we should take.

The analysis for the interviews used the two frameworks outlined here, based on the ICVF and distributed leadership models. The latter was based on the outcome of the ALTC project 'Lessons learnt: identifying synergies in distributed leadership projects' (LE9-1222).

4.2.3 Mapping the scope of research education coordination

A key outcome was the mapping of research education coordination. We identified wide variations in the range of responsibilities undertaken by those occupying research education coordination roles. Some saw the work as primarily working with students, others focused on supervisors, and yet others worked with the institution as implementers of policies and practices. Commonly, many of these functions actually overlap as it becomes necessary, for example, to influence the institution or supervisors in order to work effectively with students. See Figures 1- 4.

Figure 1. Scope of research education coordination

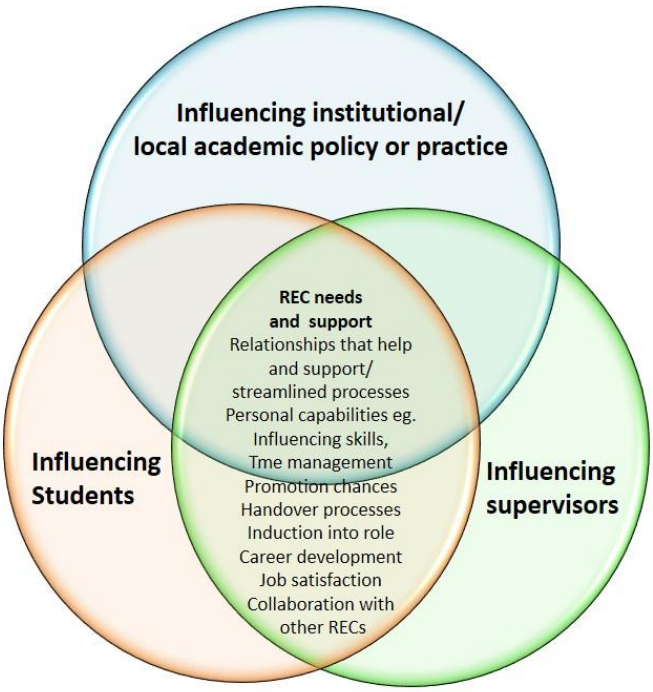


Figure 2. Influencing students

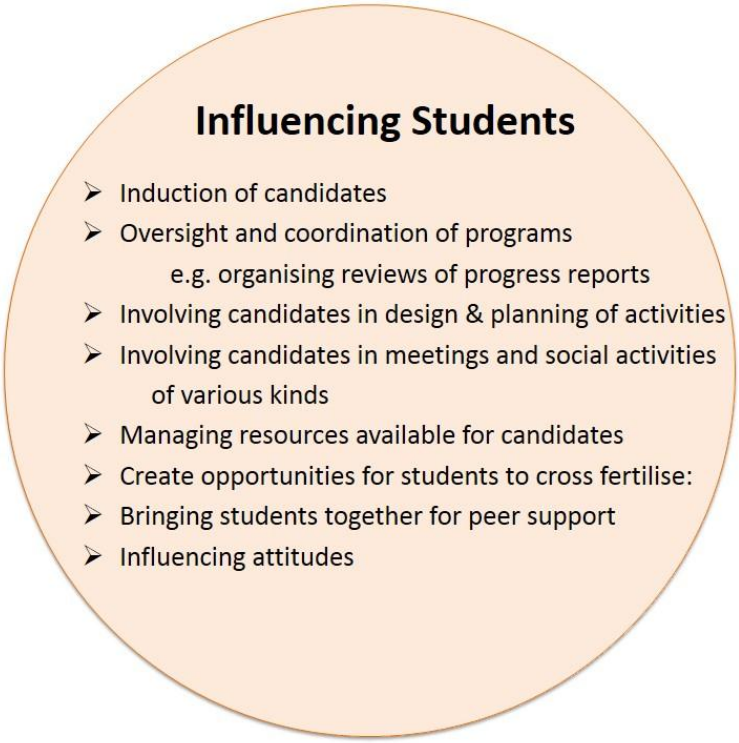


Figure 3. Influencing supervisors



Figure 4. Influencing institutions and local academic policy or practice



One of the major interests of the project team was what each coordinator saw as their role, how they learnt the role, what work allocation they got for their role and what changes they had seen in it. When asked to describe their role many spoke about their day-to-day activities of administration and dealing with students. While most indicated that they had learnt as they went along to a greater or lesser degree, one or two mentioned being given 'folders' from the previous occupant of the role. No mention of training or systematic introduction to the role was made. When asked about how much time they were allocated for their role, either formally through workload plans or informally through discussion with their managers, many indicated that it was 'not enough' and some said that there was no recognition of these responsibilities in their workloads. Several of the interviewees discussed how their roles had changed since they took on their position, including the effects of the growing numbers of students, and compliance and other regulatory issues.

4.3 The leadership roles of RECs

A striking finding from both formal interviews with RECs and their participation in the project-run workshops, was how resistant many were to seeing their role as one involving leadership, although this did shift a little over the course of the project. The introduction of the notion of leadership in our discourse was only undertaken with great care, as communicating the activities of the project in these terms was not found to be conducive to encouraging engagement with the resources and activities offered. RECs accepted that their role was to exert influence (a notion compatible with that of distributed leadership), but they did not want to be labelled as leaders. A role description based on the examples provided to the project can be found in Appendix 6.

However, leadership, whether directly discussed or referred to mostly by inference, was touched on in all the interviews. In many cases leadership was exhibited but not recognised by the RECs themselves.

Several RECs commented on mentoring, including mentoring they undertook for others and also mentoring they received in their role as a REC. A few RECs commented upon their experience of professional development in terms of leadership. A number of RECs commented on their relationships to their colleagues, with issues of respect being foregrounded in terms of academic and administrative standing where RECs could be considered junior in their contexts. The issue of authority or delegation came up in many interviews, either in an informal way in terms of relationships to colleagues, or in terms of the REC's ability to make formal decisions such as signing for admissions, confirmations, etc. A few RECs commented on how having responsibility, with no authority, plays into the difficulty of the role and functioning of the REC. A small number of RECs commented on what they hoped would continue after they left their role. They also spoke about the impact being an REC has had on them and how that might influence their future.

The full analysis of the interviews, and a paper based on this analysis submitted for publication, can be found in Appendix 1 and 7 respectively.

4.4 Identification of needs

A needs analysis of RECs in the original four collaborating universities was undertaken. From a list derived from earlier interviews and from the literature, respondents were asked to indicate, in their opinion, how important each need was and whether they experienced this need. The summary results of the needs analysis are shown in Table 1 below: the results are ranked by the average of the level of need for assistance expressed by the RECs at the four partner institutions.

Table 1. Need analysis of RECS

Activity	Average importance[1]	Average Needs
Creating a research community/culture for HDR students	3.94	3.90
Handling student enquiries effectively	3.90	3.43
Developing programs for students	3.43	3.26
Organising administrative support	3.25	3.23
Introducing change and new ideas	3.25	3.16
Policy implementation/dissemination	3.23	2.95
Networking with research education coordinators and others	2.69	2.90
Increasing student numbers	3.00	2.87
Handbook or guides for research education coordinators	3.00	2.86
Influencing others (e.g. Heads of School)	3.06	2.82
Workload and terms of reference issues	3.03	2.75
Mentoring supervisors	2.90	2.67
Understanding research education in the national/international context	2.80	2.67
Policy development	2.69	2.62
Induction of research education coordinators	2.30	2.61
Dealing with students' supervisor problems	3.48	2.60
Developing programs for supervisors	2.50	2.60

As 'Creating a research community/culture for HDR students' came top in both importance and need, particular attention was given to this issue in the development of resources. The full results of the needs analysis can be found in Appendix 2.

4.5 Scenarios

Arising from the analysis of the interview and needs survey data, a total of seven scenarios were developed for RECs which address issues they are faced with that have an element of leadership involvement. The scenarios portrayed a challenge with which RECs could identify and posed a number of questions for exploration. In the workshop setting, the scenarios

[1] A score of 1 indicated the lowest level of importance or need and a score of 5 indicated the highest level of importance or need.

were shared and useful directions explored in detail. The versions of the scenarios found on the fIRST website for use by individual RECs will also include the good ideas from workshop participants and insights from the experience of the team have been consolidated as issues for further consideration. The scenarios represent:

- Including and engaging HDR students;
- Building a research culture and community;
- Building a local researcher development program;
- Engaging supervisors in improving and broadening the doctoral student experience;
- Creating efficient systems and practices/managing busy work;
- Utilising involvement as a REC for career development; and
- Dealing with supervisor-student problems.

These were initially trialled in four workshops and the data obtained from participants used to refine the scenarios and to develop supporting material to expand the possible ways of addressing the issues presented in each.

The detailed scenarios can be found in Appendix 3.

4.6 Case studies

Through a network of contacts, the team was able to identify a number of examples of existing good practice in research education coordination. Cases were chosen to illustrate the key issues and problems faced by RECs that had been identified in the needs analysis. The case studies examined how key issues had been addressed in real settings.

An additional set of in-depth interviews was undertaken with key informants who were experienced RECs who had achieved major improvements in their schools or departments. Case studies were developed from their accounts of the problems they sought to address and the solutions they implemented. These case studies showed clearly that success occurred via persistent initiatives over many years involving multiple players. They thus reinforced the emphasis on influencing and working with others through REC roles.

The case studies cover the following areas:

- Creating a culture for research students;
- Engaging students and staff in sustainable research;
- Building research leadership; and
- Implementing change but struggling with the transition of the HDR role.

The case studies are presented on the website, but some have also been disaggregated and analysed further to create scenarios and generate papers that take up some of the themes identified, to be submitted after the end of the project. An example of a case study can be found in Appendix 4.

4.7 Regional workshops

A major outcome from the project was the impact of the series of regional workshops. Four workshops were organised in capital cities to draw together RECs from universities in each region. They were designed with multiple purposes in mind.

Firstly, they provided opportunities for RECs to get together with others in similar roles and share experiences. It was notable that many participants reported that they had not previously had the opportunity to do this within their own institutions, let alone with others.

Secondly, they provided the forum for trialling the resources and gathering feedback on the activities developed by the project. This also enabled the resources to be refined through later incorporation of the additional information arising from the experiences of RECs.

Finally, they served as occasions to disseminate outcomes of the project through direct engagement. It was interesting to observe that the initial uneasiness about the vocabulary of 'RECs' witnessed in the first workshop had been almost entirely overcome by the last.

The program and participation for the workshops can be found in Appendix 5.

5 Impact of project

As discussed earlier, the major impact of the project was that the RECs now see what they do in a broader context. They see other dimensions of their role that they were perhaps not aware of before. These dimensions include both their locations in the research education enterprise as a whole, as well as their own influencing roles locally. Recognising that one has influence is, in itself, a way of strengthening that influence.

In addition to the impact of the specific outcomes on the RECs directly involved in the project, some wider influences are discernible. Regular reporting at the twice-yearly national DDoGs meeting has been a way of both keeping this group well-informed and seeking its counsel. It has become apparent from these discussions that the project has had an impact on how DDoGs talks about and sees the role of RECs. The project has provided a means for recognising an important group of leaders in research education, who some had previously regarded as being in more functionary than leadership positions. While there are many structural issues still to be resolved in many universities, an emergent group has now become the object of general discourse.

A related impact can be seen in the RECs who have had contact with the project. They report that being part of a group that is named and has a visible role to play in the research and education enterprise has been important for their own confidence in taking up issues in their own context. They now know more about what other RECs do, how they are recognised and what is possible, and they can seek to achieve these gains in their own contexts. The fact that there is support for a national network of RECs arising from the project is testimony for a changed perspective (see recommendations Section 11).

Whether the project has improved the performance of local leadership in research education to enhance the experience of student researchers is a longer-term matter. While RECs who attended the workshops now see themselves more as leaders of research education and are more prepared to engage in leadership of research education at the local level, there is still much to be done to cement these gains. The project entered the field at a much earlier stage of development of research education coordination than was originally anticipated, so its impact should be seen as coming from a very small base.

6 Contribution to knowledge and practice and links with other projects

Unlike many OLT projects that have a strong knowledge base and links to projects in a similar area, this one, with its focus on research education leadership, involved entering an area in which there is a dearth of previous work. REC positions have emerged relatively recently, and there is no direct literature available on them. A key outcome of the project has therefore been to reveal baseline information upon which further scholarship can be built. In response to this context, the project drew on existing knowledge from a number of sources.

The first group of sources were other OLT projects that have focused on ideas the current project has utilised. The ALTC project 'Building research supervision training across Australian universities' (Hammond, et al., 2010) provided the analysis that led to the focus on local leadership in research education coordination. We also drew on the ALTC project 'Subject coordinators: Leading professional development', which used the ICVF to apply to course coordination activities.

The second group of sources were the resources of fIRST and the DDoGs.

The resources of fIRST (the consortium of Australian and New Zealand universities collaborating 'for Improving Research Supervisor Training') has demonstrated ways of providing accessible resources for research education for over 13 years. The work of fIRST has expanded from focusing on providing developmental activities for use by those conducting programs for research student supervisors, to the provision of resources directly to supervisors, to those who organise programs for them (often RECs) and, indeed, to research students themselves. The medium of the fIRST website has provided a valuable continuing base for the outputs of the project and will remain so for future developments provoked by it. The DDoGs have regularly contributed to the conceptualisation of research education and the setting of standards for various practices associated with it. Their framework for what characterises research degrees has helped focus the work undertaken with RECs.

The third source is the expanding literature on research education generally.

Members of the project team were leaders in assembling and contributing to the book *Changing Practices in Doctoral Education* (Boud & Lee, 2009), which sought to consolidate knowledge of the changed landscape for research education both in Australia and internationally. This literature discusses the new emphasis on greater distribution of responsibilities for supporting research students beyond their supervisors, the introduction of new kinds of programs for research students beyond 'research methods' courses, the diversification of outcomes for doctoral study beyond the conventional thesis, and the emerging forms of university-wide coordination and leadership found in university graduate schools.

The new contributions to knowledge of the project are two-fold.

The first is represented by the materials and resources available in an ongoing way on the RECs section of the fIRST website. These are of an essentially practical nature and provide representations of good practice, identification and exploration of key issues in research education coordination, and links to work elsewhere.

The second is represented in the scholarly paper that was produced within the timeframe of the project and which locates the work of research education coordination and coordinators within a conceptual framework of leadership and explores the tensions that have arisen within it. It takes the ICVF framework and ideas of distributed leadership and extends and elaborates them to accommodate the unique leadership challenges faced by RECs. It argues for the pivotal role of coordinators if the current research education agenda is to be realised (see Appendix 7).

In addition to its own contributions, the project has since fed in to later OLT projects in the area of research education conducted by a member of the team: *I've done a Coursework Masters, now I'd like to do a Doctorate: Can I?* and *Coursework in Australian doctoral education: What's happening, why and future directions.*

7 Critical success factors and impediments

7.1 Operational factors

The most important contribution to the success of the project was a strong team that worked together effectively throughout and met regularly. It was drawn from different kinds of universities, some of which were major players in research education and others that were relative new to the territory. This enabled a wide set of challenges to be represented around the table. The team remained intact, even though one of the original partner institutions withdrew from the project for operational reasons unconnected to the project's activities and one team member moved to another institution. In terms of team effectiveness, the importance of extended face-to-face team meetings cannot be overemphasised.

To strengthen the project, we sought other partners. We did this in such a way as to avoid the lengthy and time-consuming process of establishing new contracts, which would have diminished what we would have been able to accomplish. We were able to recruit, at the level of the respective deans of the appropriate university graduate schools, what we termed 'cascade' partner institutions: Griffith University, RMIT University and Edith Cowan University. These institutions hosted workshops for universities in their own States.

7.2 Design factors

When it became clear that regular internal meetings of the RECs in each of the partner institutions was not possible, the team was able to flexibly respond and create regional workshops that ultimately enabled more networking work than had been originally anticipated.

The project team has reflected on why attracting RECs to the local meetings was problematic and has identified a number of possible contributing factors including: workloads, perceived relevance of the meetings, impact of meetings on individuals, and the perceptions of individuals of their roles and systemic settings in the research education area. Further exploration of these issues led to a deeper understanding of the current state of development of research degree coordination. Thus it became clear that many RECs do not regard themselves as having leadership roles, and that institutions have structured some of these roles in ways that do not utilise their potential influence.

7.3 Strategic factors

What the project team did not anticipate was that the project itself would become a strategic intervention in the development of the research coordination role. The lack of adequate descriptions for roles, uncertainties about responsibilities, and ambiguities in reporting relations seemed to be almost endemic in the REC role in many places at the start of the project. The sharing and dissemination of ideas about the role, and the development and use of consistent vocabulary in each of the regional workshop, saw a quite different climate of readiness for acceptance by RECs of the notion that they were leaders by the time all of the regional workshops had been completed than had been anticipated, as this

was in marked contrast to the problems of holding the initial meetings of RECs at the partner institutions. The project has thus proved to be a strategic intervention into research education, not just an addition to an already well-functioning area.

8 Dissemination

Dissemination was an integral part of the design of the project. Each intervention enlisted the involvement of RECs and other relevant personnel in each university and all materials and resources were developed with the active involvement of participants: the collaborating universities, our cascade partners and among the universities that contributed participants to the events. The accumulation of the activities of the project helped form a culture of readiness for research education coordination in the sector.

At the national level, engaged dissemination occurred in the following ways so as to reach those with greatest influence on the uptake of the ideas and resources.

- Involvement of cascade partner institutions: RMIT University, Edith Cowan University and Griffith University.
- Development, and facilitation of state based workshops as follows:

Location	Workshop hosts	Date	Number of participants	Number of institutions represented
Sydney	University of Technology, Sydney	May 2013	45	15
Perth	Edith Cowan University	Sept 2013	20	5
Melbourne	RMIT University	Oct 2013	25	6
Brisbane	Griffith University	Nov 2013	35	5
	Total		125	31

- Presentations to Deans and Directors of Graduate Schools (DDoGS) in November 2012 and 2013;
- Presentation at Quality in Postgraduate Research conference in April 2012 and paper accepted for presentation for April 2014;
- Establishment of a National Network of Research Education Coordinators, supported through the Quality in Postgraduate Research conference;
- Promotion of resources through the flRST consortium network and website with access being available to all visitors; and
    - The flRST website includes the resources developed, along with guidelines and case studies of their use, assisting the sector to utilise, adapt and embed them in appropriate ways to suit local contexts. The advantage of using the flRST consortium website is that it is currently a key information source for RECs.
- Papers for journals.
    - One is complete (see Appendix 7) and another is in development.

9 Evaluation

9.1 Evaluation processes

Most of the data feeding into the evaluation was generated through the normal processes of conducting the project. The project team, together with the external evaluator, was engaged in an iterative process of critique and commentary throughout the project. This also applied to the participants, who were given an opportunity to comment on and critique the findings of the project and their implications for practice, as well as provide feedback on the quality and usefulness of the workshops. The external evaluator drew on the following:

- Participation in the project as a critical friend;
- Documents and documented processes;
- Steering Committee members' comments;
- Workshops with participants/end users;
- Interviews with the project leader; and
- Team members' critical reflection on the project.

9.2 Evaluation outcomes

The project changed direction somewhat from the intended research design and methodology, and in the specific outcomes and deliverables identified in the project proposal (see the Evaluation Report, Appendix 8, and the comments in Section 7 above). Nevertheless the evaluation confirmed that the primary outcomes were achieved, namely:

- Improved capacity for RECs to see themselves as leaders of research education and engage in leadership of research education at the local level;
- Improved institutional awareness of the role of research education academics and their needs for leadership development; and
- Conceptual and material resources to support the outcomes above.

A particular strength of the project is that it has managed to establish RECs and their roles as part of the vernacular in the higher education sector.

The full Evaluation Report can be found in Appendix 8.

10 Conclusions

The instigation of the project was timely in the development of the REC's role in Australia. It mapped their activities and their needs for the first time. It provided a focus for discussion of the development of that role. And, it provided the first set of resources RECs can use for their own development. In the process of doing this, it identified the somewhat underdeveloped nature of the role in universities, where this would not have been expected, and has helped create a focus on the need for clarification of this aspect of the research education endeavour.

The unsophisticated nature of research education and research education coordination in parts of many institutions has meant that attention has focused more on the provision of basic resources to assist RECs rather than an exclusive focus on the leadership dimension of their work. This realist emphasis has meant that the project has made an important contribution to the development of research education coordination, but that there is further work to be done on the leadership front when more institutions have created situations that remove unnecessary ambiguities from the REC role.

11 Recommendations

Recommendation directed to all universities via the Deans and Directors of Graduate Studies to Deputy Vice-Chancellors' Research and Deputy Vice-Chancellors' Teaching and Learning.

1. That Universities clarify the roles and positions of those undertaking research education coordination responsibilities and recognise the leadership dimensions of such positions. This should include inter alia the scope of their role, their formal and informal reporting relationships, both within their own department/school/faculty and with the university graduate school or equivalent, workload recognition and links with research centres and similar entities.

Recommendation directed to the Quality in Postgraduate Research conference, which is currently sponsoring new networks in different areas of research education and the OLT.

2. That support and opportunities for RECs to meet across institutions continues to be provided. A national network for research education coordinators should be established as a point of contact for sharing information and ideas and communicating developments. A regular space within the program should be established at the bi-annual Quality in Postgraduate Research conference.

Recommendation directed to fIRST and DDoGS.

3. That a common location for REC resources and development activities is maintained on a continuing basis at fIRST (www.first.edu.au) with advertised access for both newly-appointed and continuing RECs.

Recommendation directed to DDoGs and the OLT.

4. Taking into account the findings from this study and the later OLT-funded projects: 'I've done a Coursework Masters, now I'd like to do a Doctorate: Can I?' and 'Coursework in Australian Doctoral education: What's happening, why and future directions', that consideration is given to the relationships between proposed research education coursework and structured programs and the role of RECs, so that sufficient and appropriate support and integration be provided at local levels for centrally-initiated programs.

5. That ideas and resources for Associate Deans, Research are provided to support the work of research education coordinators and to raise their awareness of what effective coordination involves and how it relates to both research and research education priorities.

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Appendix 1 Interviews of research education coordinators

Context of RECs

The interviews provided data about the context within which these research education coordinators (RECs) operate, including the organisation of HDR students, the support they receive, and the relationships of RECs to other parts of the university. Interviewees also commented upon the number of HDR students they were responsible for and how student numbers have changed.

The RECs provided background information which indicated the high variability of their situations, in terms of both their organisation and management. The RECs were found in different levels of research education, for example some were in schools/departments but others were faculty based. They also touched on how their roles related to others, for example those responsible for research and/or heads of schools/deans etc. Some of the RECs commented upon the nature of the support they received from their schools and departments in terms of their responsibility for HDR students.

In terms of the context for RECs, the number of students they were responsible for often made a large impact. The range of current responsibilities mentioned carried from zero to several hundred students. In many cases, the RECs commented upon the growth in numbers of HDR students, which had occurred either during their tenure in their current positions or since they had joined their respective institutions. RECs commented positively upon the opportunity, when provided, to meet up with their colleagues in the HDR area both within their school/department or faculties and sometimes more widely within their university.

Many RECs discussed their relationship to the central unit or area of the university responsible for research education. In particular, RECs discussed how policy and practices were communicated and implemented. In the cases where the RECs were located in faculties they often discussed the tensions in their relationships to colleagues located in the departments/schools included in their area of responsibility. This appeared to be mirrored for RECs in schools/departments, who frequently commented upon their relationships to colleagues in faculty positions and how those relationships operated.

The Person

The individual behind the 'role of REC' was also a point raised by many interviewees. Interviewees touched on the reasons they had become a REC and/or how they had found themselves in the role, how long they had been in the role, etc.

Although in most cases interviewees explained how they became a REC, they often did not give a reason for taking on the role and for many it had not been their choice. RECs outlined how they came to the role, who had approached them and the process they went through to be appointed to the post. Many RECs indicated the length of time they had occupied the role and it appeared that for many the role was seen as a task that frequently moves from one individual to another.

The role of the REC

RECs discussed how they learnt their role and while most indicated that they had learnt as they went along to a greater or lesser degree, one or two mentioned being given 'folders' from the previous occupant of the role. When asked to describe their role, many RECs spoke about their day-to-day activities of administration and dealing with students. Many RECs responded, when asked about how much time they were allocated to their role either formally through workload plans or informally through discussion with their managers, that it was 'not enough'. Several of the RECs discussed how their roles had changed since they took on their position, including the effects of the growing number of students, and compliance and other regulatory issues.

Activities of RECs

This section covers the specific activities that RECs undertake but also includes issues such as dealing with students, supervisors and problems between students and supervisors.

RECs commented on their involvement in all aspects of the application process for students seeking to undertake higher research degrees. The allocation of supervisors to new and potential students by RECs was discussed and for some was a cause of concern. RECs talked about their involvement with scholarships, both in the selection of students and also in their strategic use of scholarships to attract students to their discipline. A few RECs commented on the induction processes and programs they provided, or not, for new students.

A few RECs commented on formal coursework, as opposed to programs that did not directly contribute to the final degree. However, many RECs were involved in arranging programs or workshops for research education students outside of formal coursework. Outside of arranging programs or workshops, some RECs performed other tasks, such as arranging social events or speakers etc. Many RECs were involved in the examination process, either from an administrative perspective or guiding students or supervisors through the process.

RECs' involvement with research education students—either in a pastoral sense, with regard to confirmation processes, or where students were having problems with their studies—was a large part of most, but not all, of their roles. REC involvement with supervisors, in terms of supporting them or providing opportunities for their professional development, was raised by those RECs with larger numbers of students. In other cases, there was recognition that, while these activities were required, they did not have the resources for them at the local level. Many RECs specifically addressed how they were involved with solving problems between supervisors and students.

RECs' responses to the question of what changes they had seen were based around increasing student numbers and compliance issues. They also covered the changes that they themselves had introduced.

Leadership

Leadership, whether directly discussed or simply inferred, was touched on in all the interviews. In many cases leadership may have occurred but was not necessarily recognised by the RECs themselves. This analysis uses two frameworks, one based on the ICVF and the

other on distributed leadership as set out in the ALTC project 'Lessons learnt: identifying synergies in distributed leadership projects'.

Distributed leadership

As mentioned above, the framework as developed by ALTC-funded project 'Lessons learnt: identifying synergies in distributed leadership projects' was used as one of the approaches to analysing the comments on leadership. The connection between the need for change and the use of distributed leadership is central to the argument around why distributed leadership is useful. Many RECs commented upon how change in research education impacted on them and their leadership activities. The culture in which leadership occurs is important, and a culture of autonomy and respect (rather than control) is one of the markers of where distributed leadership can be effective. Some RECs commented about the leadership culture of where they operated. Relationships are central to the effective use of distributed leadership as it is based upon the idea of influence rather than direction. This distributed leadership dimension can be seen as overlapping with the 'broker' role of the ICVF. Most RECs felt that they operated best by influencing others as they often had no direct authority over the things they wished to change.

Integrated Competing Values Framework (ICVF)

This section uses the roles as identified in the ICVF model as a basis for understanding how RECs undertake their leadership roles, even if they don't recognise it themselves. The broker role is about bringing colleagues together to accomplish a task or resolve problems and is closely related to the relationship dimension of distributed leadership. As indicated above, this approach was commonly discussed by RECs. Along with the role of broker, many REC activities could be seen as falling within the 'innovator' role, as they wished to make or had made changes in their areas. In terms of changes they had introduced, where they were active in ensuring that the changes were implemented this sat well with the 'delivers' role within the model. Only a very few comments by RECs could be categorised as falling in the 'developers' role but this might be because this aspect of their role was included in the 'innovator' category. The roles that were least evidenced in the interviews were the 'integrator' and 'monitor' roles.

Other aspects of leadership

Several RECs commented on mentoring, including both mentoring they undertook for others and mentoring they received in their role as a REC. A few RECs commented upon their experience of professional development in terms of leadership. A number of RECs commented on their relationships to their colleagues, with issues of respect being foregrounded in terms of academic and administrative standing where RECs could be considered junior in their contexts. The issue of authority or delegation came up in many interviews, either in an informal way in terms of relationships to colleagues, or in terms of the REC's ability to make formal decisions such as signing for admissions, confirmations, etc. A few RECs commented on how responsibility, with no authority, plays into difficulty of the role and functioning of the REC. A small number of RECs commented on what they hoped would continue after they left their role. They also spoke about the impact being a REC had had on them and how that might influence their future.

Possible needs of RECs

When asked, most, but not all, RECs discussed the needs which might form the basis for some of the resources to be developed by the project. Many RECs discussed some of their possible needs around their dealings with supervisors. Some RECs discussed some of their needs around developing new programs, either for students or for supervisors. A number of RECs thought that a handbook for their role would be useful. In all of the interviews the possibility of the REC joining a working group for the project was mentioned, and most welcomed the opportunity to network with other colleagues from within their own institutions and from others. The professional development needs of the RECs, and attitudes with regard to leadership, were discussed in several cases but most, when asked about this, did not feel that leadership development in isolation was useful. There were a lot of other potential needs identified by the RECs that, if met, could make their work more effective and efficient.

Summary of interviewees' discipline and position

Discipline	Title	Location
Biomedical Sciences	Convenor	School
Business	Convenor	School
Literature/Linguistics	Convenor	School
Medicine	Assoc Dean	Faculty
Engineering and computing	Head of HDR support services	University
Education	Head of HRD	Faculty
Science	Director of Research Degrees	Faculty
Engineering	Director	Faculty
Design	Research Education Coordinator	Faculty
Indigenous studies	Director HDR	School
Geo Science	Dept coordinator	School
Education/Science		University
Arts	Assoc Dean	Faculty
Engineering	HDR Coordinator	School
Health and Science	Assoc Dean	Faculty
Heath Science	Honours coordinator	School
Business		Faculty

Frequency of comments

Categories	ANU	UTS	Macquarie	UWS	Total	Section total
Context						61
General background	1	3	3	0	7	
Organisational structure of HDR activities	4	0	0	0	4	
Local team supporting REC	1	2	0	2	5	
Number of HDR students	2	3	3	2	10	
Growth of student numbers	0	3	2	0	5	
Networking with others in HDR area	4	4	2	2	12	
Relationship to central unit	1	0	0	2	3	
Relationship to department or school	3	2	1	0	6	
Relationship to faculty	1	1	3	1	6	
Other	0	1	0	2	3	
Person						25
Reasons for becoming a REC	2	2	2	0	6	
Becoming a REC	2	1	2	1	6	
Duration of REC	2	2	4	4	12	
Other	1	0	0	0	1	
Role	1	0	0	0	1	68
Learning the role of a REC	7	4	5	1	17	
Day-to-day activities	3	8	8	9	28	
Time allocation	3	3	4	5	15	
Change	4	2	0	1	7	
Activity of RECs						131
Admission of students	5	2	5	3	15	
Allocation of supervisors	3	1	1	1	5	
Scholarships	2	1	1	1	5	
Induction	3	0	2	1	6	
Coursework	2	2	0	0	4	
Programs	9	10	6	4	29	
Events	0	2	0	0	2	
Examination	1	2	0	1	4	
Dealing with students	8	4	6	9	27	
Dealing with supervisors	5	4	2	3	14	
Solving supervisor issues	3	0	0	0	3	
Changes	2	7	6	2	17	
Leadership						155
General	0	2	1	3	6	
Distributed leadership						

Categories	ANU	UTS	Macquarie	UWS	Total	Section total
dimensions						
General	1	0	0	0	1	
Change	0	2	4	2	8	
Culture	0	4	5	0	9	
Relationships	4	3	8	4	19	
ICVF						
General	0	0	0	1	1	
Broker	2	7	10	1	20	
Deliverer	2	1	4	1	8	
Developer	1	0	0	1	2	
Innovator	4	4	3	4	15	
Integrator	0	0	1	1	2	
Monitor	1	1	0	3	5	
Mentor	0	9	3	2	14	
Professional development	0	2	1	1	4	
Respect	2	2	1	2	7	
Authority	6	1	2	3	12	
Responsibility	2	2	0	1	5	
Legacy	1	2	1	0	4	
Other	0	3	4	6	13	
Possible needs of RECs						60
Dealing with supervisors	4	3	0	4	11	
Developing new programs	3	3	1	1	8	
Handbook	3	0	2	0	5	
Networking opportunities	6	6	1	2	15	
Professional development for the role of REC	1	2	3	0	6	
Other	6	5	3	1	15	
TOTAL	134	140	126	101	500	500

Appendix 2 Needs analysis of Research education coordinators

Table 1. Needs analysis ranked by importance on a scale of one to five

Needs	Average importance	Average Needs
Handling student enquires effectively	4.10	3.35
Creating a research community/culture	3.86	3.88
Dealing with students' s'visor probs	3.55	2.67
Developing programs for students	3.48	3.16
Organising admin support	3.42	3.44
Policy implementation/dissemination	3.30	2.94
Increasing student numbers	3.26	2.95
Workload and terms of ref issues	3.20	2.83
Introducing change and new ideas	3.16	3.25
Dealing with new supervisors	3.10	2.28
Influencing others	3.09	2.76
Handbook or guides for RECs	2.90	2.88
Mentoring supervisors	2.76	2.61
Policy development	2.70	2.59
Understanding research education	2.67	2.67
Networking with RECs and others	2.60	2.81
Dealing with experienced s'visors	2.55	1.95
Framework for handover docs	2.50	2.60
REC's role in s'visor registration	2.26	2.06
Induction of RECs	2.17	2.57
Dealing with panel supervision	2.15	1.94
Developing programs for s'visors	2.14	2.50

Table 2. Needs analysis ranked by need

Needs	Average Needs	Average importance
Creating a research community/culture	3.88	3.86
Organising admin support	3.44	3.42
Handling student enquires effectively	3.35	4.10
Introducing change and new ideas	3.25	3.16
Developing programs for students	3.16	3.48
Increasing student numbers	2.95	3.26
Policy implementation/dissemination	2.94	3.30
Handbook or guides for RECs	2.88	2.90
Workload and terms of ref issues	2.83	3.20
Networking with RECs and others	2.81	2.60
Influencing others	2.76	3.09
Dealing with students' s'visor probs	2.67	3.55
Understanding research education	2.67	2.67
Mentoring supervisors	2.61	2.76
Framework for handover docs	2.60	2.50
Policy development	2.59	2.70
Induction of RECs	2.57	2.17
Developing programs for s'visors	2.50	2.14
Dealing with new supervisors	2.28	3.10
REC's role in s'visor registration	2.06	2.26
Dealing with experienced s'visors	1.95	2.55
Dealing with panel supervision	1.94	2.15

Appendix 3 Scenarios

Scenario 1 Including and engaging candidates

As REC you have introduced a local one-day Research Induction that covers formal requirements, workshop support and roles and responsibilities of students and supervisor. The cohort of HDR students consists of a mixture of international students, part-time and working full-time and most with family responsibilities. Feedback from both full-time and part-time students was very positive. However, you have recently received some complaints by HDR students that surfaced during the mid-year review of progress. Several students complained that they never got to meet peers, discuss research plans or share information with other students. Many students, particularly the part-time and international students, felt isolated. You are fairly certain that the Dean will be keen to support you in trying to resolve the problems.

Questions for consideration

1. Who is responsible for helping students feel included?
2. What might your role be in fostering inclusion?
3. What sorts of academic and social activities might be appropriate for building peer support for:
   a) Part-time students
   b) International students
   c) Bringing together local and international students?
4. How will you know if the strategies you introduced are meeting the students' needs?

Scenario 2 Building a research culture for students and research staff.

The Faculty is trying to enhance its research and research culture and to build a community that involves research students and research staff. It has sponsored presentations by key researchers at Faculty conferences and organized a substantial seminar series. However, many students and researchers only come to presentations that are related to their immediate research area. They don't come to broader research presentations from Faculty staff or students.

When this issue was investigated, some researchers reported that they are focused on ERA results so were only interested in research closely related to their discipline. This attitude filtered down to the students. Others, particularly those with cross-disciplinary experience, were more open to different approaches and encouraged their students to broaden their understanding of research in the field and engage with the broader research culture.

Questions for consideration

1. Are conferences and seminars the best ways of fostering interaction between students and researchers? What are some alternatives?
2. Apart from discussions with the supervisor, what activities might allow students to gain a broader and deeper understanding of how research actually happens?

3. Who decides what sorts of activities might be appropriate for the student cohort? How do they get buy-in from others?

Scenario 3 Building a more formal doctoral education program

In light of recent developments in the sector, your University has proposed the introduction of more formalized doctoral education programs. Some people talk of enrolled coursework in the first year of candidature leading to a Graduate Certificate in Research whereas others talk of a suite of required courses throughout candidature.

Within your Faculty there are varying views of the aims and content of these courses, let alone their structure. Some people are keen to include specialized high-level disciplinary knowledge, others focus more on research methodologies, and others on employability skills. Others feel strongly that it is the supervisor's role to work with individual candidates on the development of knowledge and skills.

Questions for consideration

1. Who is responsible for leading the design and development of a more formal doctoral education program?
2. Is there an assumption that coursework will be introduced and embedded in the current doctoral programs?
3. Why do you think coursework is being introduced into doctoral programs?
4. What sorts of courses (disciplinary, research or employability) and what structures (formal, informal, year 1 only, throughout candidature) would you suggest? Why?
5. Who would you enlist to help design, teach (and assess) doctoral programs?
6. How will you know if the program you introduced is meeting the students' needs?

Scenario 4 Engaging supervisors in improving and broadening the doctoral student experience

Your Faculty has been successful in introducing a form of coursework, research seminars and other research activities. Research students are enthusiastic about these developments, but very few supervisors have engaged with these activities and only some have actively encouraged their students to be involved.

Most supervisors perceive that they do a good job supervising their students but the students believe that they could learn more if they were exposed to researchers other than their supervisor. The students want opportunities to hear about other research being undertaken in the faculty, to hear about different research approaches and to discuss issues around good quality research.

You sense that there is tension because some of the successful supervisors don't think it's necessary for their students to experience a range of views. You think that people would want to show off their students and that candidates need to have the opportunity to shop around but you have come to realise that there's a group of supervisors who strongly believe that it is in the best interests of students to present to their own research group. They don't want their students to be influenced by other supervisors and so they stop them from attending anything else that the department/faculty puts on. These supervisors are

protecting territory and are successful and represent a powerful faction in the department. On the other hand you know of one supervisor who only read one draft of a thesis and he's one of the best supervisors. He had coffee with students a lot of the time. If there's something working why would you want to change it? Also you are aware that it's difficult to get the poor supervisors to attend anything as well.

You want to develop a proposal for a range of activities to help build a sense of a research community and broaden the research experience for HDR students.

Questions for consideration

1. What kinds of activities do you think would help build a research community?
2. How do you initiate engagement? Do you need to issue personal invitations? How do you traverse different territories in the faculty?
3. Whose support do you need? Do you need the backing of somebody with authority, e.g. Dean/ Head of department, or do you need the most active researchers to support this initiative?
4. What will motivate supervisors to participate? How do you create value for supervisors?

Scenario 5 Creating efficient systems and practices (Managing busy work)

There are two cases to consider in this scenario.

Case 1: You have just taken over the coordination role and are starting to regret taking it on. There is just so much work to do. Every day there are emails from students, prospective students, supervisors, and then the Faculty wants immediate responses to their requests for information. Sometimes you don't even know the answers to the questions, so you have to spend time asking others before you can respond. You can't imagine what it will be like during scholarship ranking and application time, or when you have to coordinate reviews and presentations of the candidates at the end of the year. You've had enough, and since you can't quit the role, have decided to take a more methodical approach.

Questions for consideration

1. How might some of the REC processes (e.g. applications, enquiries) be streamlined?
2. Are there technologies to support you?
3. What types of relationships might you develop to help you?
4. How might you best use administration staff to help?
5. What time management techniques (of your own time) might you use to help?
6. What would you have most wanted to have been briefed on when you started?

Case 2: You are about to finish your term as a coordinator. When you began three years ago, the previous coordinator gave you a pile of papers and left the university. You don't want the incoming coordinator to face the same old challenges as there are new issues they will need to tackle. You have been thinking about planning a transition.

Questions for consideration

1. What would you have most wanted to have been briefed on when you started?
2. What would a realistic transition process look like?
3. If you were to prepare a handover document, what would be in it?
4. What tips would you provide on working effectively with colleagues?

Scenario 6 Utilising the involvement in research education coordination for career development

You have just completed a term as REC, and your Head of Department/School is having trouble finding a replacement. She has identified someone – Andy – who is worried about the time it will take and whether it will detract from his burgeoning research program. Andy is also planning to apply for promotion to Associate Professor in three years' time. Since you had been promoted during your term as REC, Andy comes to you for advice on (a) should he take the role; and (b) how could the role improve his promotion chances.

Questions for consideration

1. What answers would you give Andy? Should he take the role? How could the role improve his promotion chances? What would he need to do?
2. If he decides to take the role, what would you suggest he do to document his role for promotion?

Scenario 7 Dealing with supervisor-student problems

Your Faculty has been successful in increasing HDR enrolments but supervisory capacity is now stretched. Within the first two weeks of starting in the REC role, you received a number of complaints from students about their supervisors. Two students say that they can't get sign off on their progress reports because their principal supervisor, a senior academic, has not met with them for more than six months. Another says that she has received no helpful feedback on her work, and that the supervisor hasn't helped her with a candidature confirmation paper due next week. A third student has complained about a 'personality clash' with his third supervisor in two years. The student's progress has not been satisfactory and he is now saying that he has been bullied.

Most of the complaining students want to change supervisors and have nominated people that you know are very good supervisors but already overcommitted.

Questions for consideration

1. Whose role is it to deal with problems with supervision?
2. Where would you start in addressing these complaints? How would you deal with them?
3. What changes could be made to reduce the frequency of supervisor-student problems in the Faculty? What would it take to implement these changes?

Appendix 4 Example of a case study

Case Study 1 - Creating a culture for research students

Building research education within a faculty is a long process. It involves cycles of change, innovation, reflection and collaboration. Implementing change requires not just top-level leadership but leadership across various roles within a faculty. The following case study documents how one faculty introduced a range of strategic initiatives designed to build a stronger research education environment. The initiatives were led by multiple people to create a strong research culture, particularly for research students. This case study is also a story about opportunistic links with other initiatives, both institutional and national.

It starts by setting the context of change and the challenges facing the development of a research education culture within this specific faculty. It takes up a number of initiatives designed to incorporate particular kinds of activity to broaden the research student experience and provide for better integration of students and research cultures. It discusses how these events were built into a doctoral student plan and concludes with some reflections of those involved on the overall development.

Context

In the early 1990s, the Faculty of Education made a decision to foster research and research students, and as part of that direction appointed a new Professor and Head of School with the explicit goal to build a stronger research base within the Faculty. At that time, research students were primarily part-time and mature age, and most came with minimal research experience but with the intention to research a specific topic of their own. This meant that few of them were able to join in a research group or join an existing project. The longer-term intention was to create a context in which these research students would be able to engage in a strong research community as part of their research experience. Developments over the following 20 years were initiated and implemented by a range of local academic leaders.

Move from traditional coursework to an integrated program of activities for all doctoral students

The new appointment coincided with the start of an expansion of research student places. However, there was a sense of uncertainty in how to deal with the increase in students and supervisors. Many were encouraged to do a professional doctorate (EdD) rather than a PhD, which was an attractive alternative for many students, and numbers increased. In the early stages, the first year of the EdD was coursework, with fairly traditional research-oriented coursework units. The problem was that while most students completed the coursework stage successfully, they then had difficulty making the transition into doing their own projects. Staff tried all sorts of different ways of dealing with this; trying to do things that carried into the second year, adding activities, building the cohort so they could support each other more, and having meetings. For many years aspects of the EdD were tinkered with, in an effort to get it to work and to stop the large drop-out rate in the second or third year. There was concern about completion rates, which were not satisfactory and not as good as the PhD.

As part of the reforms in the faculty, another academic leader was influential in identifying the kinds of things that should be included in the coursework. She suggested a move away from traditional masters subjects to block activities around the different elements of what you need to do for a thesis; for example, early discussions about 'what's the difference between a PhD and an EdD', and including blocks on the 'literature review', 'ethics', 'planning a study', 'methodology' and so on. Rather than organising the program around different course units, it was an integrated program with continuity and oversight from a single coordinator. These changes were instituted for the EdD and although it was generally regarded as a better program, there were still problems with drop-out rates after the end of the first year.

Parallel to the EdD developments, there was an increase in PhD enrolments. There was considerable overlap in the EdD and PhD cohorts in terms of demographics and types of study, although some PhD students are younger, more likely to be full-time and more likely to be attached to externally-funded research projects. PhD students showed interest in the EdD block programs and requested to be included. Over time the new model became accepted as the introductory program for all doctoral students in the Faculty. Students don't have much sense of being enrolled in coursework in the traditional sense because every first year assignment is a part of what they would be doing anyway for their research activity.

Particular initiatives

Community of scholars meetings

Concurrently with these changes there were PhD students saying 'well we don't actually get together much, we don't know who these other people are, we don't have much contact with the Faculty'. The faculty had always had research seminars but that wasn't regarded as enough because seminars are always topic or visitor driven and that meant there wasn't much opportunity for students to talk about research more generally. In particular, there was very little opportunity for students to talk about research with staff other than their supervisor, and even then supervisors tended to talk about research only in direct relation to the student's project. In many cases, students often did not know what research their supervisor was working on unless they just happened to have presented a seminar about it. Therefore the senior staff in the faculty identified a gap: there wasn't a community of research that included research students. Although certain research groupings were very active, there wasn't a strong community beyond the immediate players and certainly not with students who were working on topics that did not directly connect with staff projects. What was identified was a gap between the student program and what researchers did.

Various possibilities were explored and one of the strategies adopted was what was termed 'a community of scholars meeting'. The community of scholars started with a monthly meeting in late afternoon or evening so that the part-timers who were at work could get to it. The idea was that it was a place where researchers could talk about doing research. At these meetings, staff and students were able to present their research and raise issues to a supportive group of insiders as distinct from the public and often final version given in a seminar. There were also opportunities for students to plan the sessions themselves. A staff member was available to support the students and the students' steering group, but the aim

was for it to be student managed. Involvement was voluntary and no records were kept of who attended.

Sometimes staff attended, particularly when they were specifically invited to do something, however staff involvement was a continuing problem. On occasions more than one member of staff would be invited and there would be a discussion about an open topic, such as 'How do you find a question to research'. Different people would tell stories about how they grappled with this question for one of their projects. So the focus was on demystifying research, and being able to discuss the things students wanted to know about research but didn't get told in a research course.

Student Research Conferences

Another initiative in building a strong research culture and engaging research students was the Student Research Conference. Students are encouraged to present a paper even in their first year of enrolment, and specific staff are also invited to present. A wider group of staff are encouraged to come along not just to hear the students but to contribute to the sessions by discussing the research process, acting as keynote speakers, or being discussants on panels. Participation was not mandatory for students as the intention was to make it like any conference. The approach was always that 'if it wasn't interesting enough for students to come along anyway then it probably wasn't worth doing and just getting students to come along for the sake of coming along is not sufficient reason'. The annual student conference is organised by students. A staff member was available to help with but students, particularly the full-time ones, were encouraged to do most of the organising e.g. calling for abstracts, vetting contributions, arranging rooms. This initiative has continued for over ten years and it has been adopted by the subsequent mega-Faculty, following a restructure.

Doctoral Research Plans

Part of the context of the new 'employability agenda' led by the federal government was that there were concerns about 'Do doctoral students actually get jobs' and 'Are they equipped to get jobs'. The question being asked of/in universities was 'So what are you doing in your programs to develop skills other than doing one project'.

Whilst it was acknowledged that there were external pressure on universities to make research degree graduates more employable through diversifying their work to a broader range of activities than their thesis, internally, there was also concern in the faculty that the various activities that students undertook in conjunction with their studies were not recognised and recorded. Doctoral students often ended up with little to show other than their completed thesis.

The Faculty therefore introduced a Doctoral Research Plan, This plan was based on a structure for the three stages of a doctorate. The first stage was pre-confirmation, before the major doctoral assessment at the end of the first full-time year equivalent. The second was the post-confirmation period when the student was immersed in the agreed project, and then there was the later phase that led to completion. A range of things that students might do in these different stages was identified and listed as prompts for each stage. They

included things like participating with the community of scholars or presenting papers at internal conferences but also it encompassed students doing other things like going on placement somewhere or presenting papers at conferences or writing a journal paper. The idea was that students would keep a record of what they did. The intention was not to generate a formal portfolio but to provide a kind of template, which had prompts of possibilities. Students populated it with the things that they did.

This process subsequently transmuted into the University's Doctoral Framework. The concept was taken up by the University Graduate School and was effectively trialled within one faculty. It is now included in the Doctoral Framework which has been progressively rolled out to all faculties.

The Doctoral Research Plan identifies needs, but it is not only what is needed for a particular doctoral project, but also what is required to meet the DDOGS framework for doctoral capabilities, and whatever else the student would want to incorporate into their studies. The idea of this plan was that it was negotiated with the student and the supervisor, with the oversight of the research degree co-ordinator, because some of the things went beyond what the supervisor could organise or do. Students have a different plan for each stage of their doctoral studies but it is a rolling plan which changes over time. For instance, students prepare and negotiate a plan and at the end of six months a review is undertaken. In those six months before the review the plan is updated and modified it. It then that gets handed in to the faculty and at the end of the year submitted to the University Graduate School.

This initiative was a combination of what people saw to be good practice, the willingness of a number of individuals to devote some energy to it and also the slowly changing regulatory framework that underpinned it. Now, supervisors are faced with the requirement to have a discussion with students about the plan within the overall doctoral framework. There continues to still be some corridor talk about how some students and their supervisors are trying to ignore it, but it is part of the change strategy that recognises that if you have a device that students own and that students' drive it, supervisors are brought along.

Reflections on the process of implementing change

Many of the faculty initiatives have eventually become part of the infrastructure and the 'normal' way of doing things. Rather than waiting for changes to be required (either externally driven or internally driven), needs have been identified and initiatives started. Then when changes came along, we've been able to appropriate them and use the change to legitimise what we've been doing and to move it to the next step. These strategies have to be seen as long-term cultural changes and the processes are not meant to be stifling.

All the changes are hard won; none of them occur easily, none of them occur through just doing one thing, none of them occur through a policy, and none of them occur through setting up an activity. They've got to be continually reinforced. From the leadership perspective, whoever is in the position of authority can't do it all; no one person can do it all. The great success of the initiatives in Education has been the diversity of people that have been involved. Different people have done different things, so the weight of all the responsibility and change hasn't sat on one set of shoulders. Also by embedding the new practices in the 'normal' process, the advantage is that when people change or move on, or

when they change role, there are other people in the system that understand what the issues are and what needs to be done so we're not continually reinventing the wheel.

The process of building a quality research education environment is like a collective renewal process where you have to keep on tackling it and working away at it in order to meet change. Sometimes these are driven by external performance, for example, issues like completions have been very influential. Bringing in new people and re-energising it is also important, for example, we have young post-docs with relevant skills running some short courses or workshops for students and contributing now to this overall doctoral framework. It's always going to be fragile, always going to be individually dependant, but if the overall climate in the faculty is supportive and appreciative of initiatives in this area, then worthwhile change is possible.

Commentary

The initiatives documented in this case study reflect a response to the changing nature of doctoral education since the 1990s; in particular the need to support a different and broader student cohort, meet agendas to increase student enrolments, ensure greater student engagement in research leading to better student experiences and better completion rates, and produce students with improved employability opportunities.

The recognition amongst academic staff that doctoral students needed a new pedagogical model in order to flourish was innovative. The activities and processes to build this new pedagogical model were not driven by a single ideology but were a considered reaction to student demand or identified need. Multiple initiatives were implemented to address different issues. Ideas were tried out, reviewed and adapted over time. Consideration was given to the contexts of students and environment. Most activities became formalised and embedded into normal practice.

The leadership to make these changes was spread across several layers within the faculty: at the Dean level, at the Research Degrees Coordinator level and at the doctoral program level. Rather than relying on a single point of leadership, the notion of distributed leadership, with multiple nodes of activity and multiple contributions from different people with different skills and levels of involvement, proved to be a particularly successful way of developing initiatives that were compatible with each other, contributed to enhancing the overall process and helped sustain the energy. The advantage of having a bigger entity to share responsibility is preferable because otherwise the success of initiatives becomes too dependent on one person. Embedding new activities and processes into a framework that has been ratified by the academic community also means that changes do not rely on individuals. Engaging new staff in the activities means that the processes evolve and adapt to new influences and environments.

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Appendix 5 Workshops

Example program

9.00 – 9.30 Arrival, coffee and registration

9.30 –9.45 Contemporary issues in research education
Tony Sheil, Griffith University

9.45 – 10.30 An overview of local leadership in research education
Nicky Solomon, UTS

10.30 – 11.30 The current role of a research education coordinator
Nicky Solomon, UTS

11.30 – 11.55 Interim findings from the Building Local Leadership in Research Education project
Jo McKenzie, UTS

11.55– 12.00 Introduction to fIRST – an online resource for supervisor training
Jo McKenzie, UTS

12.00 – 12.30 Lunch

12.30 – 2.00 Developing practices for research education coordination
Jo McKenzie, UTS

2.00 – 2.15 Tea

2.15 – 2.45 Dealing with challenges in research education coordination

2.45 – 3.00 Wrap up and the next steps in the project

Appendix 6 Roles of research education coordinators

The purpose of the guideline is to specify the general duties required of departmental Higher Degree Research directors within the Faculty. The duties cover areas to do with quality assurance related to quality of applicants and their applications, education and training of research students and their supervisors as well as candidature systems and processes. They include:

1. Support the Terms of Reference for the Faculty Higher Degree Research (HDR) Committee.
2. Represent department at the Faculty Higher Degree Research Committee meetings, including scholarship ranking meetings.
3. Participate in any sub-committees or working parties, as assigned by the AD HDR.
4. Disseminate all relevant HDR information to academic staff in department, and follow up any action items.
5. Provide the HDR team with relevant departmental information for HDR documents including prospectus, annual reports, etc.
6. Attend and complete relevant training associated with HDR processes.
7. Together with the Associate Dean Higher Degree Research and Head of Department act as an escalation point for grievances.
8. Be present at key Faculty events including welcome, commencement and marketing events related to Higher Degree Research (when applicable).
9. Process and respond to departmental Enquiries of Interest (EOI) forwarded to you by the Faculty HDR team. Tasks include initial assessment of the eligibility of entry into the HDR Pathway and/or MPhil or PhD program based on prior research experience; liaison with, and allocation of supervisor.
10. Review and approve candidature and scholarship applications and any other relevant documents as delegated by the Head of Department or the Associate Dean HDR.
11. Develop and maintain appropriate records on departmental HDR activities including candidate details, supervisor loads, workload allocation for each candidate supervised, and supervisory capacity under the respective departmental workload model.
12. Where possible, ensure junior staff are paired with senior academics on supervisory panels.
13. Attend progress reviews with candidates and supervisors as per departmental processes (best practice is six monthly progress reviews).
14. Approve candidate Annual Progress Report (APR)
15. Conduct candidate progress reviews as required following the AD HDR recommendation from the Annual Progress Report process, and report back to the ADHDR on each candidate reviewed.
16. Review Submission dates for completing candidates as required, and assist supervisors to help candidates meet submission dates.
17. Disseminate information about seminars, training sessions and social events to HDR candidates and academics in the department.
18. Encourage and correspond with research active staff to ensure attendance at supervisory training events.

Appendix 7 The coordination role in research education: emerging understandings and dilemmas for leadership

David Boud[1], Angela Brew[2], Robyn Dowling[2], Margaret Kiley[3], Jo McKenzie[1], Janne Malfroy[4], Kevin Ryland[1] and Nicky Solomon[1]

[1]University of Technology, Sydney

[2]Macquarie University

[3]Australian National University

[4]Australian Catholic University

Abstract

Changes in expectations of research education worldwide have seen the rise of new demands beyond supervision, and have highlighted the need for academic leadership in research education at a local level. Based on an interview study of those who have taken up local leadership roles in four Australian universities, this paper maps and analyses different dimensions of the emerging leadership role of research education coordination. It argues that while there is increasing clarity of what is required, there are considerable tensions in the nature of the coordination role and how coordination is to be executed. In particular, what leadership roles are appropriate, and how can they be positioned effectively within universities? The paper draws on the Integrated Competing Values Framework to focus on the activities of coordination, and on ideas of distributed leadership to discuss the leadership that characterises coordination. It is argued that without acknowledgement of the influences that coordinators need to exert and the positioning and support needed to achieve this, the contemporary agenda for research education will not be realised.

Introduction

Significant challenges and changes occurring in research education are having a direct impact on the nature of research degrees, on the requirements for supervision and its leadership (Boud & Lee, 2009). The central units responsible for the conduct of research education (typically, university graduate schools) have become well established and their strategic and procedural leadership roles are accepted in many institutions. Research supervisors provide leadership to students and this has been a growing area of study (Pearson & Brew, 2002; Lee, 2008). The third important area of leadership, and one that is less well recognised and understood, lies between research supervisors and the central entity responsible for research education. Most universities have a designated position at the faculty, school or departmental level that is responsible to varying degrees for research education. Such local-level positions are variously called ‘HDR coordinator’, ‘student research coordinator’, ‘graduate convenor’, ‘graduate studies coordinator’ and similar. We have chosen to call all such positions ‘research education coordinators’ (RECs). There is considerable variation between universities, and indeed faculties, in how these positions are conceived. It is also clear that the roles and practices of those responsible for local-level research education are evolving as research

education itself changes. However, relatively little is known about these roles and how they might vary across disciplines and institutional contexts.

The aim of this paper is to examine this hitherto undocumented, un-researched and emergent leadership role in research education coordination. What do those who undertake such roles do? How do they characterise their work? What expectations are placed on them? While coordination appears to be framed in different ways in different countries, the relatively institutionally devolved nature of decision-making about research education in Australia enables consideration of a range of issues within one national system. It introduces a conceptual framework which we use to discuss features of coordination and leadership and locates the role of local coordination within the wider evolution of research education. It then draws on an empirical study of what coordinators do and how they see their role to argue that the considerable variation and ambiguities in relationships provide a challenge to seeing these roles clearly as leadership positions which further the new agendas for research education expected by universities.

Conceptual framework

To explore the potential leadership features of these emerging research education coordination roles, the research reported in this paper drew on the growing body of work on course coordinators, who are at similar middle academic levels and face similar challenges (Lefoe et al, 2011). Central to this work is the Integrated Competing Values Framework (ICVF) (Vilkinas & Cartan, 2006; Vilkinas, Leask, & Ladyshewsky, 2009) that was adapted from an organisational management model (Quinn 1984; Quinn, Faerman, Thompson & McGrath, 2003;Quinn & Rohrbaugh 1983) for such roles (see Figure 1). The ICVF provides a tool for analysing leadership features in any organisational role and has been used for analyses of other kinds of coordination roles in higher education. Indeed this framework has already been used in the context of research education. Vilkinas (2002) used an early version to describe the roles of research supervisors. We have used this framework to map the various activities of research education coordinators in order to understand coordination roles in a broader context of notions of leadership.

The ICVF includes the roles of Innovator, Broker, Deliverer/Monitor, Developer (of people) and Integrator (a role which includes selection and integration of the other roles and reflective learning). Vilkinas (2002) described these roles in relation to internal-external and task-people oriented dimensions of leadership. Previous work on course coordinator leadership (Vilkinas, Leask, & Ladyshewsky, 2009) has assumed that each individual coordinator will need to take on all of these roles, although with varying emphases. However, this assumption may not hold for research education coordination roles. A version of the model was therefore used to provide a heuristic device for examining the activities involved in research education coordination at the collective level, rather than at the level of each individual coordinator. This provided a useful way of conceptualising the range and focus of current REC activities, and the competing values and priorities that inform them, while pointing to possible futures for these roles.

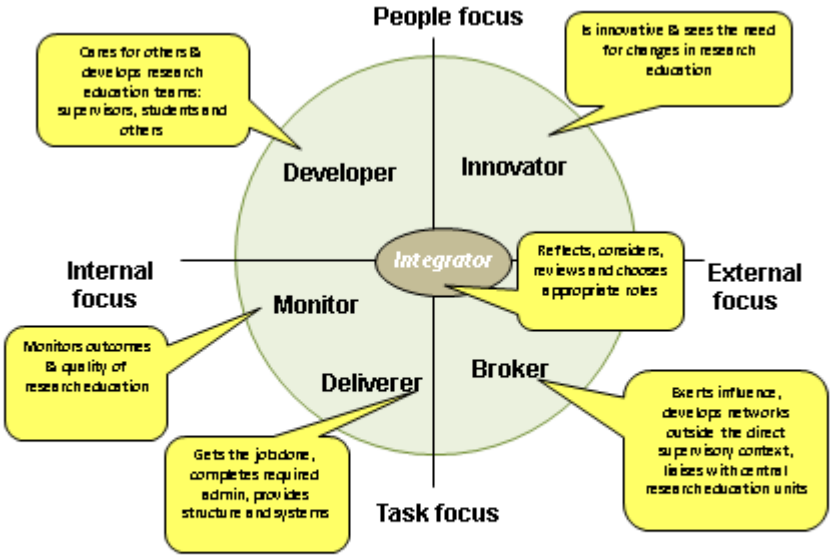


Figure1. A research education coordination role framework (based on the ICVF (Vilkinas & Cartan, 2006)

In addition to the ICVF focus on Research Education Coordinator roles and activities, and consistent with the notion of research education coordination as a collective rather than individual activity, we drew on the notion of distributed leadership to provide a theoretical framework for the setting of the role. The characteristic of distributed leadership that sets it apart from positional leadership is that it focuses on the context and culture of the organisation rather than the traits and behaviours of individuals (Gosling, Bolden and Petrov, 2009; Lumby, 2009). It provides a way of seeing leadership not in formal structural terms, but as a dimension of the responsibilities of all roles which seek to influence others (Gronn, 2000). Distributed leadership has been seen as an approach that produces the most effective outcomes within the ethos of higher education (Bolden, Petrov, & Gosling, 2009; Gosling, Bolden, & Petrov, 2009; Gronn, 2000). As Jones, Lefoe, Harvey and Ryland (2012, p. 67) describe it 'while multiple theories of leadership exist, the higher education sector requires a less hierarchical approach that takes account of its specialised and professional context'. It has been argued (Bolden, Petrov, & Gosling, 2008) that distributed leadership already occurs in many places in the sector but it may be either chaotic and/or not recognised as such.

Relationships are central to the effective use of distributed leadership as it is based upon the idea of influence rather than direction. While the importance of mid-level leadership in institutional change is recognised (de Boer & Goedegebuure, 2009), it is often under-acknowledged in institutional settings, particularly where there is no obvious structure linking different levels of leadership (Gronn, 2009) and where it is not acknowledged through mechanisms such as salary allowances. It is recognised that middle-level leadership can be a source of change within an institution (de Boer & Goedegebuure, 2009). Indeed, middle level leadership is critical as it can aid or obstruct the introduction of institutional change.

Any participant in any situation can exercise distribututed leadership through influencing others. While Corrigan (2013) questions whether distributed leadership is rhetoric or reality, we suggest that the idea does have heuristic utility in exploring the ways in which research education coordinators exert influence in their institutions.

In this paper we next outline changes taking place in research education internationally to provide a context for the discussion. We draw then on an interview study of those occupying coordination positions in four Australian universities. We identify the particular emphases and map the scope of these roles and how they are located and exercise leadership within their institutions. The paper then discusses the differences and dilemma manifest in present conceptions of coordination and the desirability of focusing greater organisational attention on local leadership to more fully realise the policies for research education that have already been adopted in principle.

The changing face of research education

Changes in doctoral education are partly the result of its growth and diversity away from the 'traditional' PhD, together with a growing understanding of the importance of a relationship between research education and innovation and economic development. A key challenge confronting government, professions, industry and the higher education sector is various governments' visions for advanced value-adding economies and the need for highly skilled researchers to realise these visions (Austin & Wulff, 2004; National Science Board, 2003; Kehm, 2007; Park, 2007). In Australia, like many other countries, this has also been accompanied by policies and strategies that focus on increasing the number of higher degree by research graduates and broadening their capabilities (eg. DIISR, 2010).

The diversity of professional and educational backgrounds of higher degree by research students and the career trajectories of such graduates have increased. In terms of the latter, for many they now include, but go beyond, employment in university positions (Pearson et al, 2011). An earlier project 'Building research supervision training across Australian universities' (Hammond, Ryland, Tennant, & Boud, 2010) found that there were on-going challenges as a consequence of higher expectations from government to increase research degree completions and make doctoral graduates more employable outside academe, which flowed through both to supervisors and those who manage them.

These challenges have led to three foci in research education today. Firstly, research degree study is about advancing knowledge in a field and making a contribution to research outputs. Secondly, research education is about the development of the work-related skills and capabilities of the candidate as researcher beyond particular research outcomes (Cumming & Kiley, 2009; Cumming, 2010). Thirdly, there is government pressure to improve completion rates for research students (Bourke, Holbrook, Lovat & Farley, 2004).

As a consequence of the recognition that research education must form researchers rather than just produce research, there has been a trend to increase the formalisation and professionalization of research higher degrees (Halse & Malfroy, 2010). These include the extra-faculty establishment of university graduate schools or equivalent. The supervision of research students is becoming more visible, transparent and accountable (Manathunga, 2005). In addition, the notion that students can effectively learn research through a singular approach based on individual supervision, through an apprenticeship model, is no longer regarded as viable (Cumming, 2010). Rather, a new range of learning and teaching approaches is required extending research education practices and involving a number of other individuals (Boud & Lee, 2009).

Low levels of student satisfaction with the intellectual climate of their faculties or research centres (PREQ, 2011) has also prompted a renewed focus on building more supportive research communities for research students. Thus, there are growing demands on and beyond

the role of supervision. New roles in the local management and leadership of research education are therefore emerging. One such role is what we have come to term research education coordination.

Methodology

This paper draws on data collected in the first stage of a two-year national project to develop resources for research education coordinators. The objective of this stage was to identify the role and needs of research education coordinators. This was pursued through conducting a series of eighteen interviews with people engaged in the coordinator role in four partner universities between December 2011 and February 2012. These institutions comprise a range of types of university with well-developed research education practices.

Interviewees were selected through peer nomination to maximise the variety of types of research education coordination role within each institution. An attempt was made to maximise the variation amongst interviewees so that a broad range of roles could be covered. As this is the first study to address the nature of the research education coordinator role, information was sought from coordinators themselves rather than from those with whom coordinators are likely to come into contact, e.g. supervisors, students or directors of graduate schools. Members of the research team from the same institution as the interviewees conducted the interviews in order to enable institutional references to be fully explicated. The interviews were transcribed and then subjected to analysis by an independent person not involved in interviewing. The focus of the analysis (using NVivo) was to identify the types and range of roles undertaken by the interviewees and how they saw them. This was done firstly by application of the ICVF as mentioned above, and then through ideas of distributed leadership.

In reviewing the initial outcomes of the NVivo analysis, it became evident that while there was much individual variation, there were also two consistent dimensions. The first was the scope of the role, whether defined formally or informally. The second was its organisational focus. These dimensions became important for further analysis of the ICVF and distributed leadership themes, and are used as organising categories for the findings described in this paper.

Findings

A major interest of the study was what the coordinators saw as their role, how they learnt the role, what work allocation they got for such work and what changes they have seen in such work. It became apparent that there are considerable differences in the range of formal responsibilities taken by those occupying research education coordination roles. In some universities, these roles are viewed as primarily administrative, for example, in organising the allocation of students to supervisors and overseeing examination arrangements. However in others they are seen as having an academic focus with responsibilities for running structured doctoral programs, developing supervisory capacity and developing a culture for research students. However, few institutions explicitly see those occupying these as leadership roles. Similarly, many staff who find themselves in this kind of leadership role, like others in mid-level informal leadership positions may not see themselves as leaders but rather as administrators or managers (de Boer & Goedegebuure, 2009).

When asked to describe their role many spoke about day-to-day activities of administration and dealing with students. They indicated that while to some degree they all learnt as they

went along, one or two were given ‘folders’ from the previous occupant of the role. No mention of training or systematic introduction to the role was made. Many of their responses indicated that time allocated for their role, either formally through workload plans or informally through discussion with their managers, was not enough. Several of the interviewees discussed how their roles had changed since they took on their position including the effects of the growing number of students, compliance and other regulatory issues. Indeed, it very soon became apparent to the project team that there was a need to establish new ways of viewing the activities and influence of research education coordinators. Therefore we next map the scope of activities and functions that coordinators said that they were engaged in. We then look at how these are organisationally focused.

Scope of coordination

Some coordinators saw their role as primarily working with students, others tend to work more with supervisors, whereas others work mainly at the institutional level as implementers of policies and practices. Commonly, many of these functions overlap as it becomes necessary, for example, to influence the institution or supervisors in order to work effectively with students. See Figure 2.

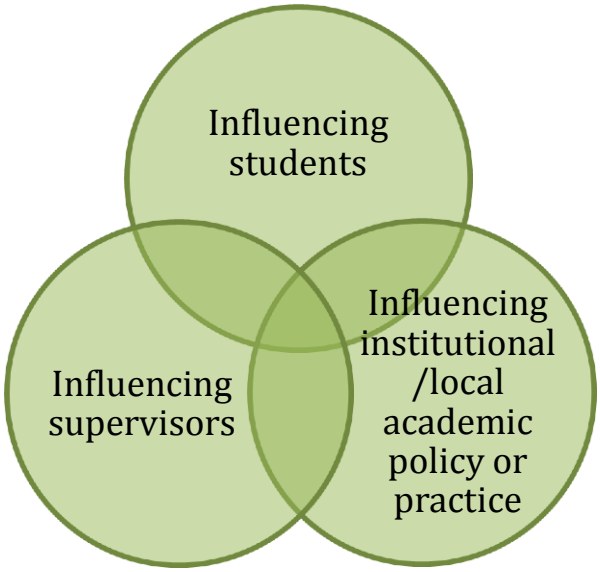


Figure 2. Scope of research education coordination

Focus on influencing students

Those with this focus were commonly involved as the first contact point for admitting potential research students and putting them in touch with potential supervisors. Interviewees commented on their involvement in all aspects of the application process. The different aspects included: the ranking and strategic use of scholarships and the allocation of supervisors to new candidates. The Student Coordinator may oversee this process and signoff on the paperwork. In terms of the ICVF they are acting as a Deliverer and Monitor.

> *I am the contact person for future students and I help find them a supervisor. I may put them in touch with someone who I think would be suitable or I encourage them to look at the website and see what different groups are doing. When the*

student finds a supervisor who says 'yes I am interested' then I can sign the paper (Biomedical sciences, University 1)

Many coordinators were involved in the examination process either from an administrative perspective or guiding the process. These activities also tend to fall in the Monitor and the Deliverer segment of the ICVF.

Coordinators may also be involved in organising student-related activities and programs whether formal or informal. These may range from induction and orientation sessions, to organising a yearly student conference. A number commented on induction processes and programs they provided, or not, for new students. While they mentioned formal coursework, many coordinators were involved in programs or workshops for research education students outside such coursework as well as organising other events such as social events or visiting speakers. In terms of the ICVF these activities exemplify the Developer role in relation to students.

I try to organise two gatherings a year with all the students; one at the beginning so they can to get to know each other and one towards the end of the year. We also have a yearly student conference for our PhD students. It's a student organised one so we are not organising it but certainly we are in the background as a sort of fall-back and to answer questions.' (Science, University 1)

Interviewees' involvement with research students either in a pastoral sense, confirmation processes, reviewing yearly reports on students and signing them off or where the students have problems with their studies was a large part of most, but not all, roles. Those coordinators who dealt with larger number of students raised involvement with supervisors in terms of supporting and providing professional development. In other cases they often recognised what was required but they did not have the resources to do it at the local level. Many interviewees specifically addressed how they were involved with solving problems between supervisors and students.

When students have their milestones and reports then I read the reports and I sign them off. Sometimes students come to me with their problems and I see if I can do anything about them. One student came with a big problem about the graduate field on the testamur because it didn't match the area of research he had undertaken so we sorted that out for him. (Biomedical sciences, University 1)

In this way, in terms of the ICVF they were carrying out the Broker role.

Focus on influencing supervisors

Coordinators with this focus were commonly involved in working primarily with supervisors. The Research Coordinator's work with this focus may include:

- Supporting and mentoring new supervisors
- Dealing with problem supervisors
- Organising activities for supervisors
- Maintaining the supervisor register

- Ensuring cover when supervisors are absent

Liaising with central academic development unit and/or the graduate school for supervisor development

'I am interested in supporting new supervisors but also getting more experienced supervisors to embrace new ways of doing things and I think that is part of our plans. I am also interested in some sort of mode of communal mentoring opportunities for new research supervisors to get together and discuss the kinds of issues that they find and looking for ways of sharing their experiences as well.' (Education, University 1)

This is quite a different emphasis than that of those focused on students although those that see their role in this way often work with both students and supervisors. It includes considerable aspects of the Developer role in the ICVF but here the focus is on supervisor, not student development.

Focus on influencing the institution

Those with this focus were commonly involved in the development of policies or practices and linking with other faculties, the university graduate school or equivalent. They exemplify the Innovator role in the ICVF, but also often the Monitor, where the focus is on assuring quality in practice, or the Developer where the focus is on improving the experience of students or supervisors.

Typically this focus may be that of a person with a designated role such as head of research degrees in the faculty. It may be a senior staff position charged with oversight of research degrees in all the different areas of the faculty. The person with this focus may work primarily with the directors/coordinators of research areas, as well as staff in the research office. They are likely to work at the macro level, by developing the vision for what research degrees should look like in the faculty, the processes that are used, and standardisation and quality assurance of those processes. This role may not have a lot of direct contact with students, except in cases that need particular support e.g. where an issue that has arisen with a supervisor, or the work progress of a student. There is likely to be active engagement with supervisors but the main focus is the institution, faculty or school. It may include:

- Convening a committee such as a research degrees committee within the faculty.
- Having the authority of the faculty to make decisions and sign off on paperwork
- Working to improve the practice of supervision, by supporting new supervisors, and helping more experienced supervisors embrace new practices
- Working with the directors/coordinators from research groups to help them organise structured activities for students.
- Contributing to student seminars, or organising student workshops
- Membership of the board of the university graduate school.

Most of what I do is at the macro level: it's the vision for what research degrees should look like in the faculty, the processes that we use, standardisation and quality assurance of those processes. I convene a committee called the Research Degrees Committee …. We meet to decide on policy that we're going to implement, generally policy that I bring to the group and negotiate with the group and modify as required by the members of the group and then it's really up to the group members to sell that vision to the people in their … [area]
(Education, University 2)

Organisational focus of research degree coordination

We now turn more specifically to the question of the aims of such coordination; what it is intended to achieve and how coordinators exercise influence in their role. While, research coordination emerged from the processes of admitting research students and allocating them to supervisors at school or departmental level, in an expanded conception of the role, it is increasingly located in one of two ways: either focused on building research strengths or on managing and improving practice (see Figure 2). In many instances, actual roles are a hybrid of the two emphases, particularly in contexts where a university has a large number of research strengths.

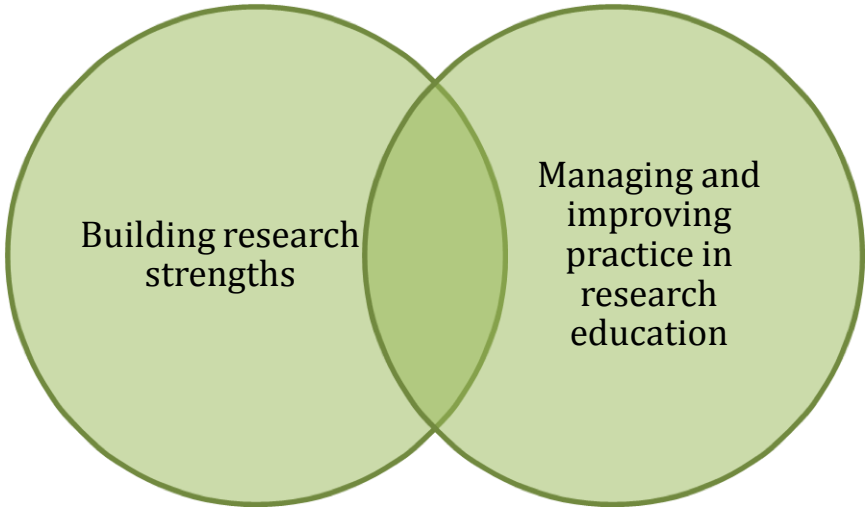


Figure 2. Organisational focus of research education coordination

Related to building research strengths

The emphasis of the roles in some institutions is on recruiting and developing students to support research centres designated as institutional research strengths. Development of students is framed within the needs and future directions of an established program of research. Quality is seen in terms of contributing to building the overall capacity of the research strength as well as developing the student. In this sense the coordinator role exemplifies the Broker and/or Innovator and Developer roles.

… The idea is to enrich the research experience of post graduates but it's slightly unique in that it's not just for post graduates. It's actually for all the members of research community and that includes academics and post docs as well. It's to develop a community so everyone looks after each other and gives support: …

students can see how academics do things and also get the support they need. (Geosciences, University 3)

Often coordinators have a wider role than for a given research strength. Indeed, there can be a tension between allocating students equitably across supervisors in a school and the strategic role of building particular research capacity in a priority area.

Related to managing and improving practice in research education

In some instances the emphasis is not so much on building research strengths in a particular area but on providing high quality experiences for students no matter where or with whom they are supervised. A focus on good programs, linking students with the wider resources of the institution and in developing supervision to meet contemporary standards of quality is typical. The Broker role becomes particularly important, as the coordinator may need to liaise with others in many roles. Coordination may be located within a wider group than a designated research strength: a school or faculty, for example.

My role is Head of Research Degrees in the Faculty. It's a senior staff position charged with oversight of research degrees in all the different areas of the Faculty. We have about 300 research students, and my role takes up about 0.4 of my time. As students are assigned to research strength areas, I work primarily with the directors/coordinators of those areas, as well as staff in the research office. … I don't have a lot of direct contact with students: most of the interaction I have with students is because there is some kind of issue that has arisen either with the supervisor or because they're running behind in their work and they need support or they need to do things in a different way or a supervisors concerned about them. (Education, University 2)

Choice of which organisational focus coordinators take is of considerable strategic importance and should reflect overall research policy of the institution and the university graduate school if there is one. Ambiguity can create tensions in the coordination role that are difficulty to manage, with tensions between a strategic Innovator role and time-poor Deliverer being common. For RECs, the roles and the values associated with those roles are often distributed, so the notion of 'competing values' inherent in the ICVF can be reflected in competing demands for the RECs' priorities and time.

I was doing a hundred other things, the teaching and others and then I got that, I have no problem with it but if I have help, if I understand what I need to do then I can plan and I'm not learning along the way and saying 'oh I have to fix this and I have to fix this' and 'oh by the way XXX goes to XXX and I'm thinking so should I now start a total revamp of the system and then in six months time I won't be here and someone else is taking over and they might want a totally different system or don't want to do anything with it apart from signing and then it looks really bad. (Biomedical Sciences, University 1).

The biggest part is actually paper pushing as I found out just a huge amount of paper, constant surveillance and monitoring and just a huge amount of signing bits of paper…. So far I haven't had a huge amount of sense of strategy and I think that's partly because the larger strategy is set by the university and the larger strategy at the moment I think is the introduction of the new Graduate Program … but I also think it's because it's hard to think strategically because

> *there's just not enough time in terms of the day to day stuff. So I was thinking about this the other day, 'am I thinking strategically' and I think probably not that much because of the day to day stuff.* (Science, University 3)

The Coordination Role and the issue of Leadership

As seen above, most of the interviewees made remarks that could be categorised within the Broker role of the IVCF model, that is, about bringing either students or colleagues or both together to accomplish a task or resolve problems. Along with the role of Broker many coordinator activities could be seen within the Innovator role as they wished to make or had made changes in their areas. In terms of changes they had introduced where they were active in ensuring that the changes were implemented this sat well with the Deliver role of the model. Only a very few comments by coordinators were categorised as falling in the Developer role which includes caring for others and building teams. The roles that were least evidenced in the interviews were the Developer and Monitor roles.

The ICVF has been useful in identifying the particular kinds of activities that coordinators are engaged in. However, it does not explain the ways in which coordinators work within their institutional context in the exercise of leadership.

While the main focus of respondents' comments was their functional responsibilities and how they saw them, leadership was directly discussed or was touched on in all the interviews. In many cases when the interviewer suggested to the interviewee that leadership may have occurred but not necessarily been recognised by the coordinators themselves, a role as a leader was specifically denied. This raises the issue of what respondents were taking leadership to be and what they saw as not being leadership. There were statements that clearly positioned leadership as synonymous with having a managerial or influential role and having formal academic responsibility for others, as is the case with heads of departments. When leadership was acknowledged, it was done so in terms of what the individual brings to cope with the tasks they face.

> *It is leadership because I did formulate the idea, there was a need and I filled the gap and I understand that that can be seen as leadership clearly* (Indigenous Studies, University 3)

> *'So leadership is broader though is really difficult because … no one has the role to be a leader … but on the other hand the non-role base leadership requires support by the people who are in the role as leadership positions* (Education and Computing, University 1)

Many coordinators commented upon how changes in doctoral education practice impacted on them and their leadership activities.

> *I think it's very much about selling the vision and negotiating and consulting with people rather than saying 'this is how it's going to be* (Education, University 2)

> *You need to lead up and down, you need to be totally pivotal to find out your stakeholders, see who've got the most urgency legitimacy and power, sort out what happens because really I'm a nobody in the College* (Business, University 4)

These leadership enactments exemplify the position of coordinators who are rarely identified as leaders and indeed, do not see themselves as such but who occupy a liminal space between those who have a defined leadership or management role such as deans and directors of graduate studies on the one hand, and students and supervisors carrying out particular tasks on the other.

Distributed leadership

This notion of informal leaders occupying roles of influence and with the ability to introduce change is brought to the fore in the concept of distributed leadership (Gosling, et al., 2009; Lumby, 2009). The settings for building leadership capacity using distributed leadership go beyond the development of positional leaders to focus on ensuring the context and culture of an institution are appropriate (Bolden, et al., 2008). It also foregrounds opportunities for informal leaders to develop their skills which, as we have seen, is a role played by coordinators. The culture in which such leadership occurs is important and a culture of autonomy and respect rather than control is one of the markers of where distributed leadership can be effective. This kind of culture is typical of research education coordination and is therefore very useful in understanding the role in relation to the institutional context.

The distributed leadership dimension overlaps with the broker role of the ICVF which, as we saw above, helps to explain a considerable part of the activities of the coordinator. Most coordinators felt that they operated best by influencing others as they often had no direct authority over things they wish to change. Thus, while the ICVF framework describes the activities of the research education coordinator, a distributed leadership view fits more readily with how coordinators see themselves. They eschew positional leadership because they do not see themselves as having positional authority, but they do see themselves as exercising influence.

> *If someone said 'oh explain a situation where you're a leader in your role' well I'd have to think about it because I think of myself more as a facilitator* (Geoscience, University 3*)*

> *Influencing colleagues about supervision (whether that be in the department or the university) is a form of leadership, even if it is just convincing them of something the university wants them to do!* (Social Science, University 3)

As exemplified in the quotations, leadership in research education has many of the characteristics of distributed leadership. For example, it is common for the dean of the graduate school, academic developers working with research supervisors, the faculty or departmental co-ordinators and supervisors not to sit within a single institutional structure: reporting relationships often exist outside the group with a common interest in research education. Therefore, changes often have to occur through informal networks by means of persuasion and advice rather than by formal authority. Within faculties this structure is also replicated in the associate dean of research portfolio, research education coordinators, leaders of research groups and supervisors. They may not be connected through a single formal structure but rather through informal networks without a unitary hierarchy present. These situations are typical of where a distributed leadership approach can be effective in enabling change (Gosling, et al., 2009).

Discussion

It is evident from this analysis, which has been reinforced by subsequent meetings with a wider range of those involved in coordination, that regardless of the mapping of the possibilities of this function, there is not a de facto single role of research education coordinator or even acceptance of what the necessary range of activities within a role should be. Despite the clear shifts in policy regarding research education that create a demand for the coordination function, locally, nationally and internationally, the features associated with coordination do not appear to be implemented in a coordinated manner in many contexts. In many cases, the roles described in the ICVF are distributed across staff in several different roles, or some roles, such as Developer, may be performed only to a limited extent. Even within the same university there appears to be different types of position in different faculties with different emphases in each. This suggests that development is ad hoc and in many cases there is no overall institutional strategy defining the research education coordination role and resolving the sometimes conflicting reporting paths.

Furthermore, coordination is in many cases curiously unrelated to supervisor training which may be organised centrally without significant input and engagement from faculty and departmental practices. The role of coordinators in relation to the development of supervisors is yet to be fully recognised. Where institutions provide for central development so that supervisors become aware of institutional policies and procedures; (work which might reasonably be conducted by a graduate school or an academic development centre), there is also a need for development at the departmental and/or faculty level and within research centres. This is an important function that sits with no one unless there is a local coordination role. Those occupying such roles can be exemplars of good practice and can raise important issues to be addressed at the local level, for example, how to encourage students to participate in the research culture of the department. Coordinators can also arrange disciplinary supervisor mentoring and, as the first port of call when things go wrong, are in a good position to take steps to ameliorate unacceptable supervision practice.

It is clear that research education roles are emerging at different rates in different places; with one of our partner institutions currently limiting the role to little more than the traditional one of assessing applicants and allocating students. It is also clear from our data, however, that these roles have developed much more extensively in some universities and that these developments are not necessarily related to the institution's standing in research. We have shown in our analysis that in some institutions and departments the research education coordinator role is focused specifically on building the institution's research strengths and in others the focus is weighted more towards managing and improving practice. As demands on research education continue to grow, both of these foci are likely to be needed. It is therefore important that institutional research strategies take into account the ways in which these functions might be performed or enhanced through strengthening the role of the research education coordinator.

Some coordination positions are formally recognised with job descriptions, allocation of workload and a defined position in relation to academic management. Other coordinators operate informally with fuzzy boundaries on what they do, with no clear sense of what is expected of them and with little accountability. This ambiguity does little to foster research education. Our analysis does not suggest that one person should necessarily undertake these different roles. Institutions will find different ways to address these issues.

While it is apparent to the external observer that those with coordination roles are already exercising leadership and will need to do so more as their positions are strengthened, coordinators showed a disturbing lack of acknowledgement of their role as influencers among a minority of institutions. This lack of acknowledgement occurs mainly when there is lack of clarity within the institution about what the role involves. There is thus a need for institutional development with regard to this if the new requirements of research education are to be fulfilled.

Our data suggest that institutions will need to examine suitable and sustainable coordination positions, whether they are stand alone or in conjunction with other responsibilities, and take steps to ensure that the personnel appointed to take on these roles are given the appropriate resources and support to exercise the leadership necessary in carrying them out. Most importantly, ambiguities in what the position does and does not include will need to be addressed. We should not be sanguine however that the local leadership dimension of these positions will be embraced with enthusiasm. There is enough evidence in our data to suggest that, in the context of growing resistance to work intensification and expectations that more is done with less, investment in making these roles attractive within the context of an academic career will be needed if they are to develop successfully.

Conclusion

Changes in the landscape of research higher degrees suggest that strengthening coordination of research education is important because even though the role of supervisors is likely to develop further in the future, there is also a need for people within academic units that have a broader perspective on research education than supervisors. If any of the developments occurring in research education are to be effectively realised, there is a need for more disciplinarily grounded perspectives than the centralised units and functions such as those embodied in university graduate schools allow for. There is also a need for a more nuanced understanding of the needs of students that goes beyond formal degree requirements and can focus on inducting them into research communities. The relationship between research students and research strengths and the need for research students to be seen as central to the research priorities of the institution is becoming more significant across universities as research intensification rapidly proceeds. This article has provided an overview of the activities of the research education coordinator and mapped their various functions. We have argued that the role is a leadership one in the sense articulated in distributed leadership. This suggests that it is therefore important that all of the issues mentioned in this article are addressed centrally as well as at departmental and faculty levels. Changes in research education will not be fully realised unless there is both willingness at the institutional levels and local champions to foster the new connections needed.

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Appendix 8 Evaluation report

Evaluator

Emeritus Professor Mark Tennant[2]

Introduction

This project was funded by the Office for Learning and Teaching (OLT)[3] under the Leadership for Excellence in Learning and Teaching Program, which is a competitive grants scheme. A key focus of this program is leadership capacity building through promoting systematic, structured support for academic leadership. The aim of the project is to build leadership capacity for research education coordinators working at the faculty level. It does so through developing a framework and a set of supporting resources and activities for research education leadership. The focus is on middle level leadership such as the role of research education co-ordinator.

Context for the evaluation

This project has already been subjected to an assessment process against a set of criteria in the Guidelines for the program. In addition to being assessed against the criteria, all proposals for grants for projects have been assessed for their contribution to the mission and objectives of the OLT and for their synergy with the OLT's values and principles for action. The OLT requires an independent evaluation, with a focus on the quality of the project and the extent to which it meets its stated aims, outcomes/outputs and deliverables. This is a 'fit for purpose' evaluation, but the evaluation also needs to comment on the extent to which the project reflects the mission, objectives, values and principles of the OLT.

The OLT has also expressed a particular view about the evaluation process and the role of the evaluator. That is, the evaluation is both formative and summative. In its formative aspect the evaluator is positioned as a critical friend providing feedback and commentary during the project on such matters as the clarity of documents, ethics approvals, the analysis of data, the theoretical framework or model being applied, the research design and data gathering process, the interpretation of data, the construction of resources, and dissemination/networking strategies. The summative aspect comprises a report at the conclusion of the project. The report has three principal functions: firstly, it has a quality assurance and auditing function for the funding agency (OLT); secondly, it recommends procedural and policy implications to the funding agency; and finally it provides feedback to the project team and others who are planning to undertake similar research.

Evaluation approach

[2] Mark Tennant is an Emeritus Professor in Education at the University of Technology, Sydney. He was Dean, University Graduate School for 10 years to 2010 and prior to that he was Dean of the Faculty of Education on two occasions. He was an AUQA auditor for 10 years and is currently on the TEQSA Register. He has published widely on higher education and post-school teaching and learning.

[3] The OLT is the new location for the functions of the Australian Learning and Teaching Council (ALTC), which has now been disbanded. The OLT sits within the Department of Education. The project was originally funded by the ALTC.

The project proposal sets out a very specific brief for the evaluator: " to critically review the underlying concepts of the project, the methodology, the progress of the project, the production of the resources, the feedback from participants and the governances of the project". I have interpreted these elements quite broadly and subsumed them under the following headings, which serve to structure this report:

- Project rationale, values and principles
- The concepts informing the project
- The research design and methodology
- Outcomes/deliverables (including resources)

Management and governance of the project.

What can be learned from this project?

Recommendations

It is worth noting that the project team members are also configured as evaluators in this project, very much engaged in the iterative process of critique and commentary. This also applies to the participants who were given an opportunity to comment on and critique the findings of the research and their implications for practice. This is also true to some extent of the Steering Group. As such, most of the data feeding into the evaluation was generated through the normal processes of conducting the project. As the evaluator of this project I have drawn on the following sources:

1. Participation in the project as a critical friend[4]
2. Documents and documented processes
3. Steering Committee members' comments
4. Workshops with participants/end users
5. Interviews with the project leader
6. Team members' critical reflection on the project.

I don't believe I have a vested interest in the outcomes of this project, however please note that I was Chair of the fIRST Steering Committee until 2010 and only recently resigned from this Committee. I have also re-written and updated some material on fIRST during my tenure as an Evaluator (examining theses, opinions questionnaire, exploring the roles and responsibilities of supervisors, causes of student-supervisor problems). Finally I was a Team Member on an earlier and related ALTC grant 'Building research supervision and training across Australian universities'.

Project rationale, values and principles

At its broadest level this project is concerned with the production of highly skilled researchers to who can contribute to innovation and the economic development of Australia and presumably other social, environmental and health goals. In particular the project focuses on Higher Degrees by Research (HDR) and the need for universities to

[4] This included attending five Team Meetings during the course of the project, writing a Year 1 Evaluation Report, preparing Notes on Progress for the March 2013 Team Meeting, and attending the Sydney Workshop in May 2013.

respond to the changing conditions of research education worldwide. These conditions include the growth and diversity of the student population with changing expectations and career trajectories, increasing public scrutiny of the benefits of research education for innovation and economic development, a focus on the attributes of research education graduates, and a shift towards a pedagogy that embraces factors beyond the supervisor-student relationship. The rationale for this project is that an effective institutional response to these conditions requires leadership, and that leadership capacity building is particularly important at the middle level between the research supervisors and the central faculty and/or university unit responsible for research education. This level of institutional leadership is referred to in the project by the generic term 'research education co-ordinators' (RECs) who are seen by the project team as necessary players in change, innovation and quality improvement in research education. In this project it is the RECs that are the target group for leadership capacity building.

The rationale for the project is supported by a theoretical framework and a research design which appears to be commensurate with the values and principles of the

OLT5 (inclusiveness, long term change, diversity, collaboration, high impact, future looking). In particular, one of the key underlying concepts in the project is that of distributed leadership. The concept of distributed leadership recognises that research education involves many participants across numerous levels of the university, and that not all roles are well structured or even formally defined, and are highly context dependent. As such distributed leadership is a form of shared leadership that is inclusive and collaborative. It is not surprising then that the research design engages a network of people (RECs) who have an interest and role in research education. Notably they are seen both participants and end-users of the project outcomes, engaging in community building and action learning and peer learning activities.

In summary, the project is certainly future looking in that it addresses an important emerging issue (leadership in research education) and seeks to build capacity. It is also designed and implemented in a way which draws on a collaborative network of leaders in research education, highlights the diversity apparent in the sector, and maximises the potential for impact and long term change.

The concepts informing the project

One of the deliverables for the project is to develop 'a framework for conceptualising REC leadership that can be used to inform institutional leadership capability building activities and local leadership practice'. This framework is informed by both a distributed leadership model and an adapted version of the Integrated Competing Values Framework (ICVF) (Vilkinas & Cartan, 2006; Vilkinas, et al., 2009) to fit the research education coordinator context.

Vilkinas (2002) has used the ICVF to elaborate on research supervisor roles as Innovator, Broker, Deliverer/Monitor, Developer (of people) and Integrator (a role which includes selection and integration of the other roles and reflective learning). She describes these

[5] These values and principles were taken from ALTC documents given that it was the ALTC that originally funded the project.

roles in relation to internal-external and task-people oriented dimensions of leadership. In this project, it is adapted to describe the leadership roles required of RECs. The framework presented at the QPR conference in 2012 was really only an adaptation of Vilkinas and Cartan (2006), set within a text that acknowledges the distributed nature of leadership in research education. The focus is on the roles and attributes of the REC as a leader in research education operating in a distributed leadership context.

The conceptual question for the project was how to develop a framework which is commensurate with both distributed learning and the ICVF. The problem with doing so is that the ICVF is concerned with developing the attributes of effective leaders whereas distributed leadership approach focuses on the context and culture of an organisation rather than the attributes of individual leaders. This issue was addressed towards the end of the project in a publication submitted to the Journal of Higher Education Management. The paper conceptualises the ICVF categories as being distributed across the occupants of a range of formal and informal leadership roles in research education. This raises the question of how RECs are positioned within this distributed matrix of leadership roles.

In this connection the project proposal anticipates that RECs typically see themselves as administrators and managers rather than as leaders. This view was confirmed by the interviews in Stage 1. It appears then that the RECs need to see themselves as leaders of research education and to see their roles more broadly as situated within a distributed ICVF. The framework is thus used in a twofold way: to better understand the lived role of RECs and as a heuristic device to persuade RECs of the possibilities of their role as leaders. The project's agenda, then, shifts to being a strategic intervention to promote the recognition of RECs as key personnel in research education leadership.

Also, with regard to distributed leadership, while it is true that there are different people involved at different levels in research education leadership (dean of graduate school, academic developers, research centre directors, faculty or school co-ordinators, associate deans in faculties) and that there is not a single line of authority, this is not by itself sufficient evidence for distributed leadership. Something further is needed – evidence of collaboration within the network of different players and how this network functions. Given the limited way in which RECs see their current role, it is hard to see a truly distributed leadership network operating. However the recognition of the REC role is arguably a first step in establishing a distributed leadership network.

The research design and methodology

Elements	Commentary
The development and application of a Research Education Co-ordinator Role Framework	The project saw a shift in focus from developing a framework for consultation to developing resources for consultation. The framework is used to comment on the roles and the influence seeking behaviour of RECs. It was useful in analysing the interview data and in promoting discussion at workshops.
Interviews with RECs	Seventeen interviews of RECs were completed (see Report Appendix). The interviews largely focused on the context, role, activities, and needs of RECs.
Needs analysis	The interviews were used to identify a set of needs which were then ranked by RECs. Twenty Seven RECs from the collaborating universities completed the needs survey.
Formation of REC communities in participating universities (with a focus on action learning)	This was partially completed but there were difficulties in establishing communities which ultimately led to a (very sensible) change of direction, which included the documentation of case studies and a shift in focus to: structural and organisational aspects of coordination, the issues identified in the needs survey, and the everyday pressing problems that RECs face.
Feedback on the framework from senior research education leaders	Feedback on the project was garnered from the peak body of Deans of Graduate Schools (DDOGS), the Quality in Postgraduate Research Conference (QPR), RECs and others who attended state-based workshops, the Steering Group, and the fIRST Consortium. The feedback focused principally on the needs and roles of RECs and only indirectly on the framework.
Development and trialling of resources by project team	The resources were trialled largely through a series of state-based workshops attended by RECs and others with an interest in research education. Workshops were held in Sydney, Melbourne, Perth and Brisbane. The aim was to test and refine the materials developed during the project and identify other areas of need for RECs.
State-based workshops with staff with institutional responsibility for research education and supervisor development	See above comment. In total approx. 125 people attended the workshops conducted in 4 capital cities. The workshops were held in 'cascade partner' universities, (see Final Report p. 15)
Resources modified and uploaded to fIRST website.	Scenarios and Case Studies have been developed. They are not yet uploaded to the fIRST website but the prototypes are now available and the material has been reconfigured for a web-based format.

General commentary

The difficulty in establishing REC communities is something that could be anticipated from the challenges identified in the initial project proposal, namely "A major challenge is for academics responsible for research degrees within faculties to see themselves as leaders of research education rather than only as processors of applications and allocators of supervision." Thus it was clear from the outset that RECs have not formed organic communities within the higher education sector. The interview data shows that many RECs take on the role for a short period and only as an adjunct to their other duties, and that the role varies greatly from one institution to another. In addition the interview data show that, by and large, existing RECs do not see their role in leadership terms. Given all this there is really no readiness to participate in a community of RECs. This highlighted the need for this project to position itself as introducing a change to the way research education leadership is thought about - not to simply to produce resources that reflect the needs of a community that is not recognised as such. Thus establishing a community of RECs, and a recognition of this community within the higher education sector, becomes a long-term goal rather than an element of the research design.

Similarly, the Research Education Co-ordinator Framework did not feature as an element of the research design. Rather it was something that the project team reflected on as a possible emergent *outcome* of the project.

Outcomes and deliverables

Deliverable	Evidence
A framework for conceptualising REC leadership that can be used to inform institutional leadership capability building activities and local leadership practice. The framework will be accompanied by examples of effective practices in different disciplines.	The development of the framework is an ongoing project. The link between distributed leadership and the ICVF has been addressed in a publication submitted to the Journal of Higher Education Management. The project has helped to establish the role of RECs within a broader research education coordination network. Further work needs to be done on how to understand and establish this network as exhibiting all the features of distributed leadership.
A set of adaptable resources to support REC leadership capability building, which will be made available through the fIRST website. These will include resources for leadership development activities and resources that RECs can use at the local level with supervisors and supervisor/student groups.	Seven scenarios and five case studies were developed and will be uploaded to the fIRST website. There was extensive feedback on the scenarios, principally through the state-based workshops.
A program of activities for research education leadership capability building, implemented in each partner university.	Each partner institution adopted an activity relevant to their context.

Activities will be tailored to the context of each partner.	
A set of strategies shown to have embedded local leadership development in research education	Certainly the case studies and scenarios will be useful in achieving this outcome but there would need to be a follow-up evaluation of how they are being used in universities. Participants in the workshops anticipated using the case studies within their universities.
Workshops to engage the sector with the resources and potential program options, to enable them to adapt these to their own contexts.	The state-based workshops fulfilled at least three functions: a dissemination function, and evaluation function and a community formation function. In many ways it was the last of these functions which is likely to have an enduring impact.

General commentary

This project shifted its focus and direction somewhat from what was originally intended (see Final Report). For this reason I would like to draw attention to the originally stated Primary Outcomes, which were as follows:

- Improved capacity for RECs to see themselves as leaders of research education and engage in leadership of research education at the local level. This will lead to improved capacity to develop and implement changes in research education, including research supervision and supervisor development, and improved research education for research students through more extensive and fully articulated programs within schools and faculties.
- Improved institutional awareness of the role of research education academics and their needs for leadership development.
- Conceptual and material resources to support the outcomes above.

The question is 'Did the project achieve these primary outcomes?' My assessment is that the project met these outcomes. It did so largely through engaging a range of people across the sector who have some responsibility for research education co-ordination. The most evident form of engagement were the state-based workshops, which were well attended and helped to raise awareness of the leadership roles and activities of RECs and their need for support and leadership development. The project team also engaged colleagues at QPR, DDOGS and the team is proposing to set up an ongoing QPR Special Interest Group. In addition the dissemination strategies should ensure that REC remains on the agenda in the higher education sector in Australia with publications in HERD, JHEPM and with resources available on fIRST. The conceptual framework still needs further elaborated, but overall the project team has certainly put RECs and their interests on the map.

Management and governance

Management Team	There were 14 lengthy face-to-face meetings of the Research Team from Sept 2011 to Nov 2013 (I attended 5 of these). It was evident that the Management Team worked well together and with the appointed Project Manager. There was a great deal of expertise in the team and they were well networked in the higher education sector.
Steering Group Brian Yates (UniTAS), Zlatko Skrbis (UQ), Margot Pearson (ANU), Sue Anne Ware (RMIT), Tricia Vilkinas (UniSA)	The Steering Group were invited to make comment at various stages of the project. A teleconference was held in March 2012 and feedback on the Final Report was sought and received.

What can be learned from this project?

1. The value of a strong project team and Steering Group

For this project to be successful it was necessary to engage as participants a wide range of leaders in research education with different roles, working in different institutions in Australia. The project team was ideally situated to foster this engagement, with senior academics who have made significant contributions to research, scholarship, practice, policy work and institutional reform in the area of research education. The Steering Group likewise comprises senior academics well placed to provide scholarly, practical and policy advice on research education, and general advice on project management. They are also in a position to disseminate the outcomes of the project.

Of course it is not always necessary or possible to have a team of such senior academics but in this instance it suited the purpose and approach of the project.

2. The value of a capacity to adapt to changing circumstances.

Initially the project hoped to identify an existing community of RECs and recruit them to the project. This shifted somewhat once the project team realised that an organic REC community did not actually exist, or rather, self-identify as such. The project then changed focus to highlighting the important role of research education co-ordinators at the Faculty level and, in a sense, sought to give them recognition and a voice in the higher education sector. Moreover others outside the REC community, but in leadership and management roles in universities, were also engaged in a way that helped them to better understand and act upon the issues identified as being important for taking a more systematic approach to embedding research education leadership into our universities.

3. The value of recruiting participants who were also end-users.

The participants did not just passively provide data for the project team – they were also end users already engaged with issues that mattered to them. As such they became important players in providing initial data, validating the results, and disseminating the findings.

4. Open and frequent communication among the project team

The project team had worked together as colleagues and were familiar with each other. Communication was thus open and frequent. In total there were 14 meetings of the research team in addition to team members collaborating in the workshops and in the development and critique of resources.

5. A broad view about the agenda being addressed

While the project team focused on the aims and outcomes of the project they saw this in the context of the much broader agenda of raising the profile of research education in the HE sector and beyond.

6. The value of a good understanding of the literature informing the project.

This particular project was built on a solid understanding and critique of research, policy and practices in research education. Its approach and location in the literature were clearly apparent. The team members worked on a new theoretical framework comprising an amalgam of distributed leadership and ICVF. The original intent was to develop this new framework quite early so it could be used throughout the remaining phases of the project, but this proved to be elusive. The intellectual work of the group is an ongoing project.

Recommendations

1. The OLT support projects that investigate the pedagogical and leadership dimensions of research education.

There are over 60,000 doctoral and masters research students enrolled in Australian Higher Education. Until fairly recently the standard pedagogical instrument was the supervisor-student relationship. There is now a recognition that research education is much broader than this. The current project has drawn attention to an emergent category of players in research education. There is still a great deal of work to be done in understanding the pedagogical and leadership space in research education.

2. Positioning OLT as a leader in promoting research on learning and teaching in higher education.

The *Higher Education Learning and Teaching Review,* which in many ways is the foundation document for the operation of the OLT, recommended that the distinctive branding of the OLT should be a focus on learning and teaching excellence in higher education. Now that OLT grants are recognised as part of Australia's research landscape OLT needs to consider the balance between research and development, the application of research standards,

processes, and criteria to its grants, and how it relates to other research funding bodies (e.g. should the senior contact person in each university be the DVC Research?)

3. The OLT to convene a group of grant recipients in the area of research education to map out an agenda for further studies.

This project has shown that there is a great deal of interest in research education. From a pedagogical and leadership point of view it remains a highly contested area, largely because of its positioning in a hybrid space between research and teaching and learning.

4. The OLT convene a meeting of OLT project evaluators to discuss their experiences and suggestions for improving the grant evaluation process.

There is a need to clarify the intent of an external evaluation and to evaluate the grants program as a whole. There are some issues in the evaluation process such as how to manage being a 'critical friend' while at the same time maintaining a 'critical distance', how to maintain an 'independent' stance while being employed by the project team and while working to its established evaluation process. And finally there is the issue of the relationship between the project team as evaluators and the officially appointed evaluator.