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Early Educational Research Enhancement

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Abstract

The recent introduction of the Research Quality Framework (RQF) to the tertiary education discourse in Australia has created a need for a revision or a fresh look at the way research is promoted, assessed and valued. This paper examines the changing research discourse at universities in terms of structural pathway, monitoring, and enhancement. Firstly, this paper examines different developments in the academic discourse in Australian universities in relation to the emergence of the RQF. Secondly, the paper examines the traditional model of teaching and research in which the dichotomy of teaching and research has been the foundation of many academic programs. The discussion then deals with concepts and issues such as research discourse, acculturation, mentoring and research pathways. Finally the paper discusses the early educational research enhancement project which has been introduced in the Faculty of Education, University of Tasmania.

Introduction

Research has been an important part of universities as it represents the development of new knowledge. Without research, universities are no longer seen as the frontier of knowledge. Universities are normally judged in terms of their research output, quantitatively and qualitatively. The recent introduction of the Research Quality Framework (RQF) to the tertiary education discourse in Australia has created a need for a revision or a fresh look at the way research is promoted, assessed and valued. Right or wrong, the RQF has also produced some excitement and anxiety among institutions and academics as it could lead to needed changes, institution rivalry, rigid division between research and teaching, and possible outbreak of staff movement and redundancy.

As a result, Australian universities have introduced research initiatives to enhance their research discourse to ensure that they are not disadvantaged when the RQF officially takes effect. Firstly, this paper examines different strategies employed by Australian universities in their response to the RQF. Secondly, the paper examines the traditional model of teaching and research in which the dichotomy of teaching and research has been the foundation of many academic programs. The discussion then deals with concepts and issues such as research discourse, acculturation, mentoring

and research pathways. Finally the paper discusses the early educational research enhancement project which has been introduced in the Faculty of Education, University of Tasmania.

The Research Quality Framework and emerging pathways

According to the document *Australian Science and Technology: At A Glance* produced by DEST in 2005, the Federal Government provided great financial assistance to research in Australia. Public sector expenditure on Research and Development (R&D) amounted to \$5.912 billion in 2002-03, with \$2.482 billion allocated in government research laboratories and \$3.430 billion in universities. Financial contribution to research requires an effective framework to ensure that assessment of quality and impact of research are undertaken properly. This is one of the main reasons why the Research Quality Framework has been introduced in Australia.

In December 2005, an advisory group produced a report called *Research Quality Framework: Assessing the quality and impact of research in Australia (IR1)*. It was primarily a document about the Group's final advice the Federal Minister of Education on the preferred RQF Model. Like many models with financial implications, the RQF aims at developing the basis for an improved assessment of the quality and impact of publicly funded research and an effective process to achieve this. The RQF Development Advisory Group was established on 28 March 2006. Its role is to take forward the next phase of the RQF process, particularly how the assessment model could be most effectively implemented. A distinctive feature of the Australian RQF is its explicit assessment of the impact of university research.

The RQF can be regarded as a concern about research quality evaluation in Australia. It can be interpreted as an attempt to seek some equity in research funding to institutions.

One can argue that the RQF has had some impact individually or institutionally on the research discourses in Australian universities. Institutions are encouraged to nominate research groupings for assessment. The RQF codes are useful here as they are used for research grouping. Staffs are 'classified' as follows: teaching only, research, and teaching and research staff. Teaching staff will be excluded from research groups. Thus eligible staff will be engaged in research only and teaching and research staff belong to Level B and above. In order to be included in a Research Grouping for assessment in the RQF, an eligible member of staff must have a full-time equivalent (FTE) status of 0.4 or above. In addition, each researcher is supposed to have produced 4 eligible Research Outputs over the production period. To take into consideration potential researchers, the category of early-career researcher (ECR) is introduced.

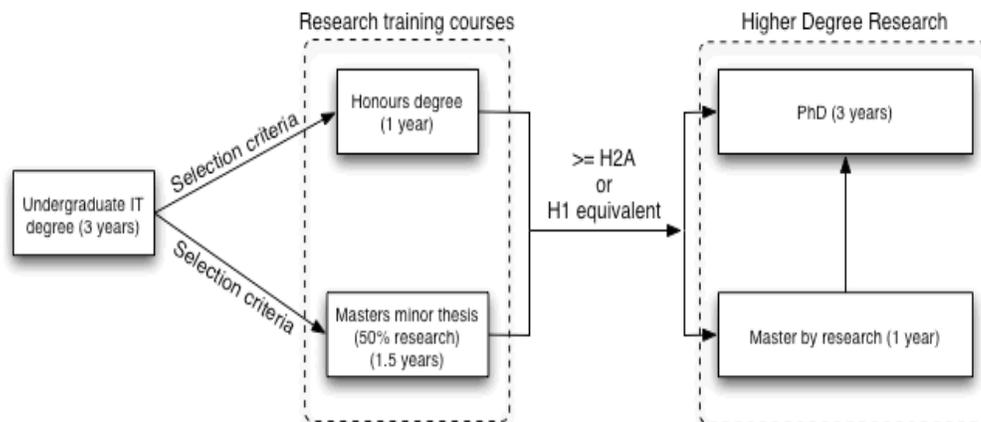
As indicated, the Research Quality Framework has marked its presence and had some impacts (in terms of anxiety, confusion and direction) in the research discourse of Australian universities. In the AARE special conference held in Cairns in 2005, the focus of the conference was on the RQF and its impacts. What should be done to deal

with this ‘force’ or phenomenon? Different speakers presented different pictures about its potential positive and negative impacts! Some were very thought-provoking; others were happy ‘to sail with the wind, not against the wind’. At the conference, collectively and individually, familiar concepts were revisited for a new emerging discourse created by the RGF, such as research acculturation, research productivity, research enhancement, research pathway, research mentoring etc.

The rest of this paper will briefly examine these revisited concepts but in a new emerging research discourse. It will look at the traditional pathway to research as well as different ways of enhancing the research discourse.

Pathways to graduate research

It appears that all the Australian universities follow the same pathway from undergraduate courses to research courses, mainly PhD. To illustrate this pathway to research, it is useful to give the following diagram from the Faculty of Information Technology, Monash (IR2)



At the undergraduate level, the focus is on course work. The introduction of the honours year provides undergraduate students with an opportunity to proceed to a research higher degree course. Basically there are pass-degree courses and honour-courses. Students with outstanding academic results are invited to undertake honour courses. At the postgraduate level, there are research-only courses, course-work only courses and courses with a mixture of research and coursework. This is referred to as ‘structural pathway’.

There are two interesting issues here. First, this pathway does not favour students who may not have outstanding academic results at the undergraduate or postgraduate levels but who have great interest in research and may switch to a research pathway later. Second, there is a difference between undertaking a research degree course and participating in a research discourse. The traditional structural research pathway, if not flexible enough, can create an unhealthy division between research and learning, while in reality these two aspects are not mutually exclusive. Later in this paper, the

discussion will focus on an early research enhancement project undertaken at the University of Tasmania. The project attempts to break the rigid dichotomy between structural research pathway and research enhancement pathway.

As mentioned in the previous discussion of this paper, primarily there are several aspects of research enhancement in a university discourse. In terms of research pathway for prospective students, the traditional model is still a dominant one, starting from the Bachelor Degree honours level to the doctorate level. Those who are not eligible for this pathway have to find another 'winding' road (e.g. Masters coursework) to enter the research pathway at a later stage or will be 'eradicated' from the research discourse altogether.

The Australian National University introduced an alternative structural pathway with a research emphasis for outstanding students starting in the first year of their undergraduate courses. The Bachelor of Philosophy (Honours) was an initiative which attempted to incorporate research into the Bachelor course from the first year. It is a research focused degree first introduced in the Faculty of Science for intellectually ambitious students who want to study at the highest level. Each student receives intensive individual attention from an academic supervisor who acts as research mentor. Gradually other faculties have introduced the Bachelor of Philosophy (Honours) in their undergraduate courses.

The Bachelor of Philosophy degree is flexible in its structure, with a student's program being determined each year in collaboration with the Program Convener. One quarter of studies in the first three years consists of individually tailored Advance studies courses, specifically designed to provide students with a strong base in research. (IR3)

The Bachelor of Philosophy degree is an alternative to the traditional pathway to capture research interest and research enhancement of young gifted students at the doorstep of research pathway. It can be seen as a research nurturing strategy which identifies students early in their academic program and acculturates them into the research discourse, otherwise they have to wait for three or four years for their research acculturation. The Bachelor of Philosophy at the ANU is not the first course in the world. The B.Phil.'s earliest form is graduate degree at Oxford University. Other universities have introduced this model in their undergraduate course such as University of Newcastle upon Tyne, Miami University, University of Pittsburgh, Northwestern University, and University of Birmingham.

Mentoring in research enhancement

Mentoring from the Greek word means enduring guidance between those who knows and cares and those who need help and care for personal growth and development. Mentoring tends to happen in various discourses such as family, school, company, village and university. In a community unit such as family and market, mentoring occurs naturally. An experienced fisherman teaches his children how to swim and catch fish. Parents coach their children how to cultivate their garden or rice field. Mentors act as a guide, a source of information, a sounding board and offer support and encouragement.

This is natural mentoring. It is both a socialisation process and mentoring co-existence. However, in a university research discourse, natural mentoring is not enough. There should be systematic approach to research mentoring for early career researchers as well as research students.

The mentoring relationship should be specific and task-focused (eg, developing a research proposal, getting something published). Very often the initial need expressed by the mentee is quite general and unfocused. It is important to spend adequate time discussing the issues together to clarify the work situation and the real needs. The mentee's needs are the guiding principle. (IR4).

The above statement of Monash University expresses the common mentoring approach often found at many universities in the world.

“If I have been able to see further, it was only because I stood on the shoulders of giants.” (IR5)

This is the welcoming eye-catching statement on the Web site of the Faculty of Economics and Commerce at the University of Melbourne. Research mentoring is not unique to this Faculty. All Australian universities do take research mentoring seriously. However, their techniques, strategies and resources vary a great deal among these institutions. In some universities, the emphasis is on the research discourse of each academic unit such as department, school, division, faculty and inter-faculty collaboration. The introduction of the Research Quality Framework may require universities to look inwards as well as outwards as far as research is concerned. For instance, mentoring will be primarily undertaken on the basis of ‘Research Grouping’ as it is the chosen unit for assessment in the RQF.

The following statement about research mentoring of the Faculty of Education at Monash University represents the common approach to research enhancement in terms of mentoring:

The mentor program provides an opportunity for academic staff in the Faculty of Education to enhance their research acumen. A mentor and mentee together plan, activate and monitor a specific research outcome desired by for the mentee. The focus of the Program is on the research needs of the mentee. (IR6)

Research mentoring is about research capacity building, individually and collectively and it is an important aspect of research discourse enhancement, particularly in a competitive research environment affected by the recent introduction of the Research Quality Framework.

Research mentoring is beneficial to both mentors and mentees. However, the main target is the acculturation of mentees in an academic research discourse (IR7).

- Provides encouragement and assistance in enhancing research skills
- Increases confidence through the demonstration of progress
- Increases expertise
- Enhances understanding of research practices

Early research enhancement project

In Australian universities, students tend to take a long pathway to reach the level of academic research, that is, undergraduate, postgraduate either by coursework or coursework with some research, Masters Honours and then research thesis. During undergraduate education, students get acquainted with the elementary knowledge of a certain discipline and receive training so as to get prepared for a certain profession in the future. They enter postgraduate education for the purpose of professional and vocational qualification and enhancement and postgraduate programmes are mainly taught courses. Students have no access to research training or experience until they undertake Masters Honours and Ph.D.

In the Education Faculty at the University of Tasmania, for instance, the Bachelor of Education's objective is to "prepare students for teaching appointments in early childhood (kindergarten, prep, grade1 and 2) and primary (grades3-6) situations (IR7). After completion of this course, the students are eligible for employment as early childhood/primary teachers. The course includes the following elements: Liberal Studies; Education Studies; School Experience and Curriculum Studies.

As for the course Master of Education, its objective is to "enable competent, experienced professionals to broaden, deepen, update and integrate knowledge of their specialised area of interest and expertise" (IR8). Research is not included. Only when the students proceed to the Master of Education with Honours, can they begin to undertake units on research methodology and dissertation. This Honours program provides students with a basic knowledge and skills for conducting research.

The Early Research Enhancement Program is an initiative to acculturate undergraduate and postgraduate coursework students into a research discourse. It is intended to promote research awareness, research skills, and research networking for students who did not have any research background. The target group was postgraduate course work students particularly those who undertake applied linguistics as their specialisation. It was primarily an early research enhancement program with the focus on acculturating students into research awareness. It is not a compulsory academic unit or module. Different from the common B.Ed Honours and the research- orientated Bachelor of Philosophy, this is not another unit or course but and added research mentoring program without formal enrolment.

How did it work?

Initially, students received an invitation to participate in the program. An information sheet was given to explain the context in which the program was offered and the benefits for participating in the program. The following brief statements were written to give prospective participants some basic information and invite them to participate in the program.

- Students are introduced to research methodology;
- Students are regularly informed of new research issues, particularly in education;
- Students are invited to attend research seminars.
- Students can incorporate their research knowledge and interests into their current assignments or projects (subject to their lecturers' approval)

- Students are encouraged (and helped with editing) to publish their papers in journals and to participate in local and international seminars/conferences (if financially viable);
- At the end, a formal letter from the Early Research Enhancement Program Coordinator will be sent to those who have fully participated in the Program to acknowledge their participation;
- This program is useful to those who want to develop a research pathway in their academic studies or future research-orientated career.

As some students could be discouraged by any extra programs and academic experiences which put more pressure and workload on their current program, it is important to ensure them that the program was flexible to accommodate their interest and changing situation. However, there were also tasks which should be taken if students were in the program:

- Developing a research pathway in close consultation with a mentor.
- Developing a yearly portfolio which should include items such as: Interesting/useful research articles, notes, questionnaire samples etc;
- Writing reflective notes or journals on ideas and issues;
- Writing a list of references
- Collecting interesting/useful materials
- Attending monthly research seminars specifically organised for this Program;
- Communicating regularly, face-to-face or email, with the Coordinator
- Students attend other research seminars and conferences if interested.

The preliminary results

The program attracted a great deal of interest from students. The first meeting was enthusiastically attended by approximately twenty students.

- Just a short note to let you know that I would love to be a part of the Early Research Enhancement Program. It sounds like a fantastic opportunity, and I am very lucky that you are offering it to me. I look forward to hearing more.

- The research seminars on research methodology were very helpful to me. It is good that you explained in simple language the link between research objectives, research questions, and questionnaire design. The discussion about the use of SPSS was most helpful. I start to like statistics now

After the first meeting, enthusiasm started to grow. Particularly the postgraduate students have developed their own research pathway for possible future study.

- I am emailing you to express my interest in the Early Research Enhancement Program. I would love to participate. You did a very good job at 'selling' the program when we met as a group on Wednesday. I think it sounds quite interesting and may be very useful for me in the future - especially if I am eligible to do honours.

- I'm pleased to participate in the research seminars. Yes, I will take into account your suggestion and will make the assignment into a conference paper. Thanks for inviting me to do a joint paper with you. It is a bit scary to do it on my own, perhaps next time.

- Thanks for following it up with me about the use of NVivo on Saturday. I have read a lot about Grounded Theory and how it helps with qualitative data analysis. It was hard for me to apply it with the use of NVivo, and now I could handle it.

The first three meetings kept up the interest of students. The program coordinator sent emails regularly to maintain the flow of communication and to provide kinds of research information such as conferences in Australia and overseas, news about research students, and research activities. The long periods of school teaching experience that undergraduate students had to undertake affected the flow of the program for them and their enthusiasm. However, for the postgraduate students, the number was steady and their enthusiasm was maintained. Here are the impacts of the program:

- Several students produced papers for journal publications and international conferences (including the AARE).
- Most students have developed a research pathway and they intend to move on to graduate research courses.
- Specific research seminar sessions were held for students to practise their presentations at a conference.
- Research portfolios were developed and they were the initial resource which will be expanded gradually.
- Students started to network with active researchers nationally and internationally.

Conclusion

The Research Quality Framework has created some excitement, anxiety and uncertainty in Australian universities. Universities can take it as a challenge which requires self-evaluation and outward looking. As a result, various attempts have been made to enhance research reputation, placing one institution over the other. Undoubtedly the Research Quality is both a divisive force for institutional survival and a driving force for research reform. This paper has attempted to examine the changing research discourse at universities in terms of structural pathway, monitoring, and enhancement. It also discusses a research enhancement program at the University of Tasmania which reflects new initiatives in promoting research at an early stage of undergraduate education. Though this enhancement program is still at its developmental stage, it reinforces the view that there should be alternative research pathways and flexible strategies of acculturating students into the academic research discourse.

References

(Note - IR: Internet Reference)

- IR1 Research quality Framework [http://www.dest.gov.au/sectors/research_sector/](http://www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_issues/research_quality_framework/default.htm)
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