An investigation of the nature and contribution of Honours programs in Australia

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Abstract

There is growing interest worldwide in the nature of Honours programs including those that serve the transition from undergraduate to postgraduate research courses. This is at a time when there is also intense interest in the effectiveness of research training, timely research candidate completion, and in the contribution of research students to university research status. In Australia prior to the 1980s Honours programs were primarily intended to provide the link between undergraduate and postgraduate research work, but this situation changed and Honours programs evolved into a variety of forms to meet new needs. With this diversity we have lost sight of whether or not Honours research projects prove effective in attracting future postgraduate research students and in preparing them for research. In this paper the authors report research that suggests that for PhD students who have completed their thesis, having an Honours qualification does not predict examination outcome, but another highly relevant question is whether or not preparation through Honours increases the likelihood of research degree completion. The first section of the paper provides an overview of the literature on research about Honours degrees, the second section presents data on doctoral outcomes for those who obtained Honours, and the third illustrates the type of information currently being collected to explore to what extent honours students are 'prepared' for the expectations associated with, and the intensity of, a research higher degree.

Keywords: Honours, research training, doctorate, teaching & learning

The degree landscape in Australian higher education is one of constant change, currently characterised by an emphasis on Quality Assurance and a heightened interest in both university teaching and learning. Government policy and methods of funding are driving universities into an increasingly competitive market on an international scale and within this framework there is also a heavy emphasis on research quality and outcomes, including the effectiveness of universities in research training. The rapid growth in the number of doctoral candidates and the greater variety of doctoral degrees and entry pathways has tended to overshadow what was once the most common pathway - the Honours year. Not that Honours has remained static, honours programs too have evolved into a variety of forms to meet new needs. There are currently around 12,000 students enrolled in at least 400 Honours programs across Australian institutions (DETYA, 2004).3

Regardless of the diversity of programs and entry pathways, a good honours outcome in the 'traditional sense' (i.e. an Honours Class 1 involving a substantial research project) remains as the preferred indicator for success in postgraduate research. But is this expectation borne out? Are honours students more likely to succeed in research and why? Do honours programs with a research component provide a strong foundation for, or facilitate transition into, doctoral studies? These are questions that are rarely raised in the literature,

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³ In 1990 the number of students enrolled in postgraduate courses was 78 851, in 1999 the number increased by 57% to 139 539. Of this 1999 figure 37 051 (27%) were research higher degrees, compared to 16 334 (21%) in 1990 (DETYA, 1999, p.50). Honours as a separate category was not reported in Department of Education, Science and Training (DEST, formerly DETYA) higher education statistics until 2000.

and are even less frequently the subject of empirical study. They are nevertheless salient ones in the quest for effective research training processes. Much more needs to be known about the nature and usefulness of undergraduate research experience and how undergraduates obtain research knowledge and understanding.

This paper provides the opportunity to merge information from two parallel research projects. It reports on findings in relation to the guestion:

- 1. Do those with honours degrees perform better in terms of PhD outcomes?
- and it illustrates the type of information currently being collected to investigate:
- 2. To what extent are honours students 'prepared' for the expectations, skills and understandings associated with a PhD and how 'ready' are they for doctoral study?

The definition and scope of Honours programs

In 1995, the Australian Vice Chancellors Committee (AVCC) published a set of Fourth Year Honours Programs Guidelines for Good Practice that defined Honours as an add-on fourth year program which follows a three-year bachelor degree. The thesis component of most programs was noted as falling between 30-70 per cent and the primary goal was identified as research training. The document stated that academics involved in supervising Honours candidates should be active researchers with a sound background in research, and encouraged, where appropriate, supervision by qualified non-academics in other sectors. (AVCC, 1995). Five years later in the United Kingdom the Quality Assurance Agency developed a series of benchmark statements at the level of the bachelor degree with Honours. Producing 47 subject area statements proved to be exceptionally labour intensive, expensive, and slowed by debates over levels of subject specificity or generality (DEST, 2002) A similar attempt was made in Australia in the 1980s but was discontinued (DEST, 2002). Overall it has proved extremely difficult to map or benchmark honours programs. Even in those countries that have newly introduced Honours programs, such as the Netherlands, it has been shown that diversity in structure develops rapidly and makes comparison and tracking difficult, especially across disciplines (van Eijl et al., 2005). There is a need for more intensive analysis of honours, and in particular study across a range of disciplines as to the types of programs and experiences offered through honours programs.

In 2000, of 526 231 students enrolled in a Bachelor degree, 12 742 (2.5%) were Bachelor Honours students (DETYA, 2000, p19). The Bachelor Honours student load was distributed across the following discipline groups: Science (24%); Social Sciences (21%); Humanities (14%); Administration, Business, Economics & Law (10%); Visual/Performing Arts (8%); Engineering (6%); Mathematics & Computers (6%); Health Sciences (6%); Education (2%); Agriculture & Renewable Resources (2%); and Built Environment (1%) (DETYA, 2000, p.58). The graph in Figure 1 serves to show the marked differences in distribution of Honours enrolments by subject areas. It also shows high and almost matching enrolments for the Masters by research and doctoral degrees, compared to a less clear pattern in Honours. In a number of subject areas, such as Education and Engineering, there appears to be little by way of Honours enrolments yet strong research enrolments.

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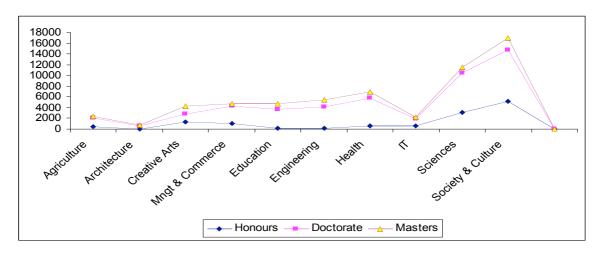


Figure 1: Student enrolment 2004: Bachelor Honours, Masters by Research, Doctorate by Research

It is difficult to give one definitive description of what constitutes an honours program. Ledgar (1996) defined Australian honours programs into two categories: Honours degrees and Degrees with Honours. Honours degrees refer to the year long program following a three year bachelor degree, requiring a high level of academic achievement for entry. These types of programs are most common in traditional disciplines such as the Sciences and the Liberal Arts. The program is usually focused on completing a research thesis. The terminology differs between institutions; for example, it may be referred to simply as an Honours Degree, an Add-on Honours course or an End-on Honours Program. Degrees with Honours refer to an award for a student completing a degree of four or more years with outstanding academic achievement. The latter are awarded in most professional degrees, including Education, Engineering and Law. In some cases students take a more demanding academic program during the latter stages of the degree than that required of a student undertaking the course leading to a pass degree. In other cases there is a built in Honours stream in the four year Bachelor degree course, referred to in policy documents as an Integrated Honours course. Concurrent Honours programmes run in parallel with the pass degree — this is a form of Honours that is gaining momentum in European countries where Honours 'colleges' are also emerging (van Eijl et al. 2005). Despite the numbers undertaking Honours, its relevance to the expanding doctoral sector and the increasing interest in the degree as a means to support the further development of outstanding students, empirical studies in the field are limited

The literature

Published literature that focuses on honours courses covers such areas as assessment (de Vries, 1999); examination (DEST, 2002); factors influencing enrolment (Prestage & Lichtenberg, 1996; Bourke, 1991; Powles & Patrick, 1989, 1991; Buckridge & Barham, 1984); student support (Martens, 1994); and academic standards across Australia (Anderson, 1993; Kwong, 1992). One of the main themes in the Honours literature however relates to the student experience. In a study of Honours students conducted at Flinders University (Hawes & Flanagan, 2000) half of the respondents reported difficulties, including lack of confidence, stress and time management problems. This theme extends to transition from Honours to postgraduate research. Postgraduate students in the discipline of Education perceived an 'abrupt transition' between undergraduate study and the experience of postgraduate research (Johnston & Broda, 1996, p.271). Aspects which were factors in the transition were the degree of structure provided in the research program, resources available for

assistance, changes in power relationships and the sense of isolation experienced (Johnston & Broda, 1996).

There is some indication in the literature that interactions impact on both the experience of a student researcher and the pathways that they take to research higher degrees. Kiley and Austin (2000) found that the Honours degree was the most common qualification prior to entering a research Masters or PhD. Moreover, the most important source of information about future research study and choice of institution for students in Australia proved to be discussion between the student and their Honours supervisor. Students also preferred to seek advice from people directly rather than to seek information through media sources. A sense of belonging and acceptance within a faculty are also important. Lovitts (2005) builds on this notion by discussing the nature of the experience of making the transition from an undergraduate student to an independent postgraduate researcher. She found that factors that contribute to degree completion include: the immediate setting in which the student works, the interactions that take place within that setting and the distribution of resources across graduates, particularly the availability of experienced supervisors.

Supervision is an important aspect of an undergraduate research students' experience. A study by Fitzsimmons, Anderson, McKenzie, Chen & Turbill (2003) explores supervision of Honours students in the Australian context, finding that the small group approach to supervising Honours students provided high levels of support and encouragement from both supervisors and fellow students and alleviated feelings of isolation. Hawes (2000) surveyed students and Honours coordinators at Flinders University and found that the transition to Honours posed problems, and also that students and Honours coordinators had different perceptions about the nature of the problems. Coordinators believed that the major problems faced by students were time management and other commitments, whereas these were given a lower priority by the students. The students were concerned about feelings of isolation, stress, and fear of failure. The disparity in perspective suggests students may not receive support in the areas where they need it most. A study in a British university from a small group of supervisors of undergraduate research in a health care profession found that gender of the supervisor may also influence the experience of a research student (Hammick & Acker, 1998).

McInerney & Robinson (2001) reviewed the Tasmanian School of Nursing Honours program, and then explored the experience of students as researchers and clinicians. Their research revealed the difficulties involved for Honours students conducting research in the field, in this case a hospital ward, and the problems associated with establishing innovative programs such as Honours within a professional context when many of those working within the profession are unfamiliar with research. The students were not only learning to be nurses, but at the same time learning to conduct research. Zuber-Skerritt (1987) also explored aspects of learning in relation to research students through case studies on action learning methodology. Similarities are drawn between problems such as isolation and loneliness experienced by Honours students and higher research-by-degree students, though the research indicates issues are accentuated for Honours students because of their greater inexperience in research and dissertation writing, and by the imposition of severe time limitations.

With respect to expectations and assessment, a study based in Ireland, explored tutor and student conceptions of the Honours research project and its assessment in the life-sciences (Stefani, Tariq, Heylings & Butcher, 1997). One finding that hints at the confusion facing students was the range of views held by staff on the nature and purpose of the research project. Another paper

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reports on the introduction of a self-evaluation exercise to encourage students to reflect on their own learning and make judgements about their progress (Heylings & Tariq, 2001). Others too wonder about the effectiveness of assessment if the focus of assessment is primarily summative. It is proposed that a portfolio, similar to that used in art and architecture, is created to document student learning. The outcome would be individual treatment and an emphasis on integrated assessment and learning (Elton 2004).

Overall, research that gets to grips with candidate experience of Honours programs, what factors contribute to success, and to what extent early research training develops research skills, is rare. Another area that is essentially unexplored is the contribution of Honours to doctoral performance, but here we have data from the second author's current research that sheds some light on whether or not those with Honours degrees perform better in terms of PhD outcomes. One example of this emergent research is outlined in the next section of the paper.

Honours and PhD outcome

The second author is currently engaged in a study of PhD examination at 8 institutions. This involved the collection of candidate information for 100 students from each institution who had completed their candidature, as well as written examination reports and examiner and recommendations (Holbrook and Bourke 2004; Holbrook et al. 2004a, 2004c). The candidate information includes the highest degree level at entry into the PhD. Of the completed students 46% entered with an Honours degree (although it is not possible to ascertain the form of the degree). Another 27% entered with a coursework masters degree and 17% with a research masters degree. Of the Honours group proportions differed between institutions (range 27% to 64%) and overall there were more females (53%) than males (47%). Those with Honours were also a significantly younger group than those with other PhD entry level qualifications and more of them stayed in full-time candidature than other groups. In terms of semesters enrolled those in the Honours group also took slightly longer to complete.

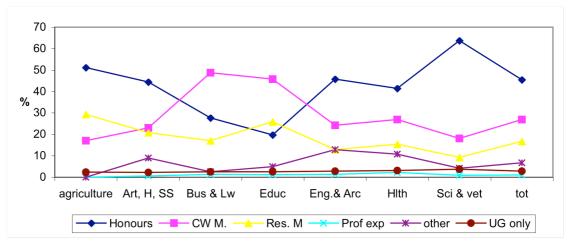


Figure 2 Distribution of entry degree by broad subject field for completed PhD students (N = 791)

When analysed by broad field of study (see figure 2) there are differences between disciplines. The proportion of students in the Honours group ranges from 20% in Education to 63% in Science. Despite the fact that we were drawing on a particular sample of completed PhD students and restricted to a small number of broad classifications of fields of study, the disciplinary pattern is not dissimilar to that for total honours enrolments in 2004 shown in Figure 1.

When Honours is compared to the total group with respect to thesis recommendation by the institution, the Honours group had a slightly better, but not significantly different outcome to the students who entered at a different level. Of those who were not required to make a change to their thesis, 61% were the Honours group as compared with 57% for all other candidates. Figure 3 provides further detail, and it is evident that those with coursework Masters entry level show a different overall pattern than Honours and research Masters, at least indicating that some experience of research has a role to play in bringing about a better outcome (i.e. the candidate is not required to make corrections or revise and resubmit their thesis). The only fail PhD in the sample entered with a professional qualification, which explains why Fail column stands at 100%.

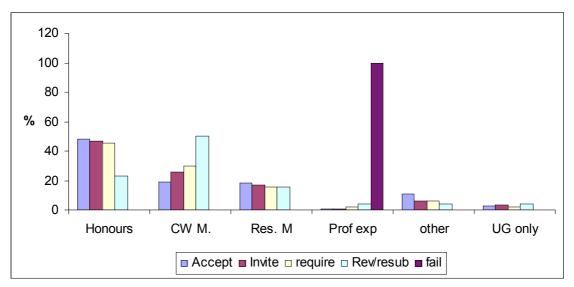


Figure 3 Final recommendation on the thesis by entry level qualification

In this study we did not collect data that would allow to us to compare the Honours group for those who completed a PhD with other candidates who did not complete. However, if we return attention to Figure 1 it is clear that relative to the numbers currently enrolled in Research higher degree candidature, Honours students are a reasonably small group, so it is worth noting that in our sample almost half of the candidates had an Honours degree even if they did not perform significantly better in examination on the recommendation measure.

Given the embedded belief within academe, and especially in the awarding of scholarships, that Honours does produce more research ready candidates, then it remains to tease out where that belief may reside and if it is accurate, especially given the knowledge above that Honours candidates do not necessarily perform better and are slightly slower in completing. It could just be that brighter students do Honours and that even without any immersion in research they would prove to be quality doctoral candidates who complete. It is to such questions that we now turn.

Determining how honours contributes to research identity, understandings and research skills

What dimensions of experience should we be examining to determine what honours might contribute to the transition into a research higher degree and why? There is an interest in the intention of honours students to go onto research higher degrees and some institutions have done their own in-house analysis, for example the University of South Australia, but the results are

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currently not available in journals. There is also an interest in what skills and understandings are acquired, but similarly, publications are rare. It is clear that bright and motivated students are welcomed into honours, but how does this translate into what they are learning whilst undertaking an Honours program, and does their learning translate across to research higher degrees? One of the key questions for the first author's study is what honours contributes in terms of being a transitional phase into research higher degrees. There needs to be a holistic perspective about what you come to honours with, and what benefits are gained from completing an honours program.

Studies have dealt with the highs and lows of the honours experience, but these on their own do not provide a framework for answers to the question of what the contribution might be. It was necessary to devise a study which encapsulated all these elements to obtain a holistic picture across disciplines. The instruments devised reflect this, and the intention is to capture the preparedness of honours students for further research. The approach for the study coalesces into four areas – learning motivation; research environment; research self-efficacy; and research orientation. These areas will inform the key question about a students' research preparedness or readiness (Diagram 1).

	Learning Motivation The learning approach towards Honours		
Research Environment The sense of belonging, including relationships, and use of resources	Research Readiness		Research Orientation Research understandings and feelings towards research
	Research Self Efficacy The intention to pursue research and a students' perceived ability to carry out research		

Diagram 1: Research Readiness Matrix

In order to collect data to inform these four areas contributing to research readiness, three types of data collection have been developed: a questionnaire, interviews with Honours coordinators and focus groups with Honours students. The multi-scale questionnaire is being distributed to all fourth year students at one higher education institution and asks for demographic information about the respondent; information about the structure of the Honours program; and details about the research project. The questionnaire also includes four scales (Table 1), three of which are developed from already existing scales and from the literature on undergraduate research student experience. The fourth scale is a new instrument which visualises the research journey for honours students, developed initially by Holbrook to identify futures orientation and the nature and density of futures imaging (Holbrook, 1998) and modified to plot the journey experienced by the Honours student. It is used to build on how the participant conceptualises their current understandings about research and predict how they see their research continuing in the future.

A respondent to the questionnaire has been selected to illustrate data from the areas contributing research readiness. This particular respondent is a female

Australian student, studying in the School of Biomedical Sciences. She is completing the honours year of a Bachelor of Biomedical Science, which is an end on program. The thesis makes up 100% of the course load for the year. The respondent believes she had no involvement in the choice of topic, has had weekly contact with her male supervisor and works in a research group. There is no specific training program within the honours program, with the main mode of teaching being lab work under the supervision of a lab manager. She has no interest at this point in postgraduate studies. The scales inform the four identified areas which contribute to research preparedness, including learning motivation, research environment, research self-efficacy and research orientation (Table 1).

Scale	Number of items	Example of item		
Learning Motivation				
Intrinsic Value	4 items	I think what I am learning in this course is useful for me to know		
Self Regulation	5 items	Even when study is dull and uninteresting I keep studying until I finish		
Cognitive Strategy Use	4 items	When I am studying for a topic, I try and make everything fit together		
Research Environment				
Learning Community Scale	6 items	I can talk to lecturers about problems I am experiencing		
Research Environment Scale	5 items	I feel I belong to the faculty community		
Research Self Efficacy				
Conceptualisation	5 items	Brainstorm areas in the literature to read about		
Implementation	5 items	Generate researchable questions		
Early Tasks	5 items	Be flexible in developing alternate research ideas		
Presenting the Results	5 items	Synthesise results with regard to current literature		
Research Orientation				
Honours Journey Plot	Self plot	The student plots and predicts their journey on the plot indicating the highs and lows, which may focus on the substance of the research and/or the emotions associated with the research journey. The plots yield data for further scale development such as positive and negative orientation to research, research imaging, & research trajectory		

Table 1: Scales used in questionnaire to inform the areas contributing to research readiness

Learning Motivation is informed by three scales Intrinsic Value, Self-regulation and Cognitive Strategy Use. In particular the aim of these scales is to look at how students approach their learning and the extent to which students are motivated. There are a series of 13 statements where the respondent is asked to indicate on a six point likert scale the extent of their agreement with the statement (examples given in Table 1), from Strongly Disagree (1) to Strongly Agree (6). The scales are adapted from the Motivated Strategies for Learning Questionnaire which measures motivational beliefs and self-regulated learning (Chye, Walker & Smith, 1997; Pintrich & De Groot, 1990). The respondent agrees with statements about Cognitive Strategy Use (4.75) and rates Intrinsic Value (5.0) as her highest motivation indicating that she thinks about her

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learning and is able to utilise internal strategies to motivate her learning. She tends to agree with statements about Self Regulation (4.0), indicating that she does persist with work when it is hard or when it is dull and uninteresting. The overall attitudes identified in the research orientation will also contribute to learning motivation, as will data from focus groups with Honours students.

Research Environment is informed by two scales developed from the literature on the experience of undergraduate student researchers, which identifies some of the difficulties undergraduate research students' experience such as isolation and time management (Hawes & Flanagan, 2000) and factors which affect the nature of the transitional experience from undergraduate to research higher degrees such as resources available, structure provided and the sense of belonging within the research environment (Johnston & Broda, 1996; Lovitts, 2005). The scales are named the Learning Community Scale and the Research Environment Scale, and consist of a series of 11 statements where the respondent is asked to indicate on a six point likert scale the extent of their agreement with the statement from Strongly Disagree (1) to Strongly Agree (6). The questionnaire respondent with statements from the Research Environment Scale (5.4) and she tends to disagree with statements from the Learning Community Scale (3.3)), indicating, for example, that she is able to access facilities such as the library to assist her in her research but that she doesn't feel part of the university and faculty learning community. In addition items in the questionnaire such as contact with supervisor; contact with industry or members of profession; whether research involves contact with a research group; and the types of facilities and access to resources required for the respondents' research are included. Interviews with Honours Coordinators will also be undertaken to complement the information provided by students about the research environment.

Research Self Efficacy is informed by a series of four scales which aim to explore students' perceptions about their research skills and to gauge whether they intend to pursue a research career. Research self-efficacy can be defined as 'one's confidence in successfully performing tasks associated with conducting research and has been found to predict graduate students' interest in conducting research' (Forester, Kahn & Hesson-McInnis, 2004, p4). The scale is based on Bandura's self-efficacy theory and is adapted from the Research Self Efficacy Measure (Forester et al., 2004), where the respondent rates confidence in their ability to perform tasks with respect to the research process, with 1 being Not at all Confident to 6 being Extremely Confident. Scales include Conceptualisation, Implementation, Early Tasks and Presenting the Results. The questionnaire respondent indicated confidence in all four areas: Conceptualising (4.8); Presenting the Results (4.4); Implementation (4.2) and Early Tasks (4.0).

Research Orientation explores research understandings and feelings towards research. New scales will be developed based on the Honours Journey Plot, in which the respondent is asked to identify the highs and lows, and key points from their research journey as well as projecting into the near future. The scales will be, 'positive/negative orientation' which picks up feelings about different tasks as well as an indication of overall feeling. The focus on tasks is encapsulated as 'research imaging', and the future projections as the scale 'research trajectory'. The plot picks up where the student is in their research program and allows us to determine areas where the student is not identifying key aspects of project development. In addition to the above, questionnaire items such as what factors contributed to choosing to do Honours and whether the respondent intends undertaking postgraduate studies will inform the area of research orientation.

An example of a completed plot by the same respondent is shown below (Diagram 2). It is interesting that she starts with high expectations and that she anticipates finishing on a high as well. Her experience with the methods; working on the literature; and writing the thesis has been low points, with the feedback from her first assessment being her lowest point. She found that the best part about the project was finishing major tasks such as the lab work and the literature review and that submitting the thesis will be her highest point. She demonstrates knowledge of research process in the Plot, and also identifies emotions such as not knowing anyone or what to do. The comments of the respondent are similar to findings about student concerns reported by Hawes (2000). Research Orientation will also be further explored with focus groups of Honours students.

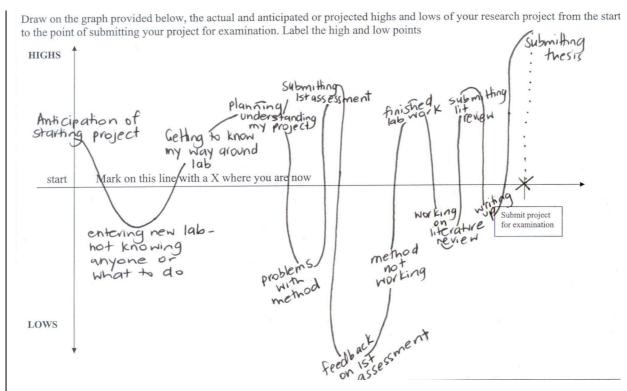


Diagram 2: Plotting and predicting the highs and lows of the Honours Journey

The framework identified uses four areas including learning motivation, research environment, research self-efficacy and research orientation to contribute to research readiness. The illustration indicates the scope of the data collection and the nature of the model to be tested.

Conclusions

Honours degrees are now many and varied, but the 'traditional' end-on Bachelor honours that has a research component is still regarded highly, and is employed as a reliable indicator of academic excellence, potential research excellence, and some degree of research preparedness. In some fields, the less traditional four year undergraduate degree with a minor research thesis awarded with a first class honours is also sufficient to enter a doctoral program in that field. While there has been a concentrated surge of research about doctoral supervision and assessment, investigation of the study of honours remains patchy and untested. How prepared are honours students entering doctoral programs across a broad range of fields to complete a doctoral thesis?

We have learned from recent research reported here that an honours degree level entry to a PhD will not necessarily lead to a better examination outcome,

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but that does not preclude the role of Honours in improving the rate of completion. Empirical work linking completions and outcomes is sparse, as is literature on what leads to good completion rates in doctoral programs. So how interested in, and prepared for further research, are students with honours degrees and what can be expected realistically? What would research readiness at that level look like? The authors propose a model that combines learning motivation and research self-efficacy with research environment and research orientation to identify research readiness. This will explore further the experience of honours students conducting research, and whether that experience makes them more prepared to carry on to doctoral research across a range of fields with differing types of honours programs. As shown by the respondent from Biomedical Science, there is much to be learned about the nature of the research experience gained during honours, and in exploring the research readiness of honours students we may be unlocking some of the keys as to why students choose to progress to research higher degrees and whether their honours experience is instrumental in its completion.

References

Anderson, B. (1993). Scutinising academic standards. In Visovic, A. (Ed) Selected Papers presented at the seventeenth annual conference of the Higher Education Research and Development Society of Australasia (pp. 454-462), University of Wellington: HERDSA

AVCC (1995). Fourth year Honours Programs: Guidelines for Good Practice. Canberra: AVCC.

Bourke, P. (1991). Honours and Postgraduate students. In Penington, D. & Bourke, P. (Eds), *Academic Careers* (pp.129-132). Parkville: University of Melbourne.

Bourke, S., Holbrook, S., Lovat, T. & Dally, K. (2004). Characteristics, degree completion times and thesis quality of Australian PhD candidate. Paper presented at the Quality in Postgraduate Research Conference, Adelaide, South Australia, 22-23 April, 2004.

Buckridge, M. & Barham, I. (1984). Transition of women to Honours. *HERDSA News*, 6(1), 6-7.

Chye, S., Walker, R.A. & Smith, I.D. (1997). Self Regulated Learning in Tertiary Students: The role of culture and self-efficacy on strategy use and academic achievement. Paper presented at the Australian Association for Research in Education Conference 1997. Retrieved Jan 31, 2006 from http://www.aare.edu.au/97pap/chyes350.htm

Department of Education Science and Training (DEST). (2002). Higher Education Review Process. Striving for quality: learning, teaching and scholarship. Retrieved Jan 31, 2006 from http://www.backingaustraliasfuture.gov.au/publications/striving_for_quality/def ault.htm

Department of Education, Training & Youth Affairs (DETYA). (2000). *Students 2000: Selected Higher Education Statistics*. Retrieved Jan 31, 2006 from www.detya.gov.au/highered/statpubs.htm

Department of Education, Training & Youth Affairs (DETYA). (2004). *Students 2004 (Full Year): Selected Higher Education Statistics.* Retrieved Jan 31, 2006 from www.detya.gov.au/highered/statpubs.htm

De Vries, P. (1999). What skulks behind the criteria? A study of dissertation in four social science departments. Retrieved Jan 31, 2006 from http://ultbase.rmit.edu.au/Articles/may99/deVries1.htm

Elton, L. (2004). Should classification of the UK Honours degree have a future? *Assessment & Evaluation in Higher Education*, 29 (4), 415-422.

Fitzsimmons, P., Anderson, R. McKenzie, B., Chen, H. and Turbill, J. (2003). *An eye on the Prize: Fourth year Honours Students, Thesis Writing and The Group Supervision Process.* Paper presented at the AARE Mini-conference October 2003, Newcastle. Retrieved Jan 31, 2006 from http://www.aare.edu.au/conf03nc/fi03018z.pdf

Forester, M., Kahn, J. & Hesson-McInnes, M. (2004). Factor Structures of three measures of research self-efficacy. *Journal of Career Assessment*, 12 (1), 3-16.

Hammick, M. & Acker, S. (1998). Undergraduate Research Supervision: gender analysis. *Studies in Higher Education*, 23 (3), 335-347.

Hawes, C. & Flanagan, A. (2000). The experience of Honours at Flinders University: Perspectives of students and Coordinators. In Kiley, M. & Mullins, G. (Eds) *Quality in Postgraduate Research: Making Ends Meet.* University of Adelaide: Advisory Centre for University Education.

Hawes (2000). Honours study at Flinders University: perspectives of students and Coordinators. *HERDSA News*, 22 (2), 28-29.

Heylings, D. & Tariq, V. (2001). Reflection and feedback on learning: a strategy for undergraduate research project work. *Assessment & Evaluation in Higher Education*, 26 (2), 153-164.

Holbrook Allyson (1998), 'The Futures Orientation of Teachers', *World Yearbook of Education 1998*, (pp. 149-62). London: Kogan Page.

Holbrook, A. & Bourke, S. (2004). An investigation of PhD examination outcome in Australia using a mixed method approach. *Australian Journal of Educational & Developmental Psychology*, 4, 153-169.

Holbrook, A., Bourke, S., Lovat, T & Dally, K. (2004a). Investigating PhD thesis examination reports. *International Journal of Educational Research*, 41 (2), 98-119.

Holbrook, A., Bourke, S., Lovat, T. & Dally, K. (2004b). PhD Theses at the Margin: Examiner Comment on re-examined theses, *Melbourne Studies in Education*, 45 (1), 89-115.

Holbrook, A., Bourke, S., Lovat, T. & Dally, K. (2004c). Qualities and characteristics in the written reports of doctoral thesis examiners. *Australian Journal of Educational & Developmental Psychology*, 4, 110-129.

Johnson, S. & Broda, J. (1996). Supporting Educational Researchers of the Future, Educational Review, 48 (3), 269-281.

Kiley, M. & Austin, A. (2000). Australian postgraduate students' perceptions, preferences and mobility. *Higher Education Research and Development,* 19(1), 75-88.

Kwong, L. (1992). Academic standards panels in Australia. In *Quality Assurance* in *Higher Education: proceedings of an international conference Hong Kong,* 1991. Craft, A. (Ed), (pp.29-37). London: Falmer Press.

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Ledgar, J. (1996). Recognition of Qualifications Across Higher Education and Vocational Education and Training (VET) Sectors: The Australian Experience. Paper presented to third joint ENIC/NARIC (European Network of Information Centres/National Academic Recognition Information Centres) networks meeting. Rome, 19 June 1996. Retrieved from http://www.detya.gov.au/noosr/occpaprs/occpaper1.htm

Lovitts, B.E. (2005). Being a good course-taker is not enough: a theoretical perspective on the transition to independent research. *Studies in Higher Education*, 30 (2), 137-154.

McInerney, F. & Robinson, A. (2001). Honours in Nursing: The struggle of students as clinicians/researchers in practice. *International Journal of Nursing Practice*, 7, 214-220.

Martens, E. (1994). Student Support in Honours and higher degree study. In Ryan, G., Little, P. & Dunn, I. (Eds). Selected contributions presented at the nineteenth annual conference and twenty first birthday celebration of the Higher Education Research and Development Society of Australasia (pp. 459-465). Campbelltown: HERDSA.

Pintrich, P.R. & DeGroot, E.V. (1990). Motivational and self-regulated learning components of classroom academic performance. Journal of Educational Psychology, 82, 33-40.

Powles, M. & Patrick, K. (1991). Recruiting Honours students in the face of market demand for pass degrees: a case study. *Education Research and Perspectives*, 10(1), 53-60.

Powles, M. & Patrick, K. (1989). Recruiting Honours students in the face of high market demand for pass degrees: a case study. Parkville: University of Melbourne.

Prestage, M. & Lichtenberg, A. (1996). Reluctant researchers: the loss of female research degree students. *Australian Journal of Career Development*, 5(2), 28-33.

Van Eijl, P., Wolfensberger, M. V.C., Schram, A. Pilot, A. (2005) *Honours programs: a perspective from the Netherlands,* Paper presented to the EARLI Biennial Conference August 23-27 Nicosia Cyprus.

Stefani, L., Tariq, V., Heylings, D. & Butcher, A. (1997). A comparison of tutor and student conceptions of undergraduate research project work. *Assessment & Evaluation in Higher Education*, 22, 271-288.

Zuber-Skerritt, O. (1987). Helping postgraduate research students learn. *Higher Education*, 16 (1), 75-94.

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