

Australian contribution

ID-E Berlin: Exploring Difference — Recruitment, Selection and Admission of Doctoral Candidates

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1. What is a PhD? What does it stand for?

The award of the PhD recognises that the candidate has reached the highest international standards of scholarship in their field, and has demonstrated the ability to make original and substantial contributions to knowledge.

The Australian PhD is awarded for the results of intensive research carried out over a minimum of three years. The focus in the Australian system is very firmly on assessment of the body of work — the thesis — presented for examination, rather than more directly on the candidate who is completing the degree. Thus the qualification reflects critical and independent peer review of the candidate's research, and ensures that holders of the degree have achieved high standards.

The clear emphasis on independent peer review of the results of research in the examination for the degree reflect the fact that PhD candidates are critical to Australia's national research agenda and are, already during their candidature, active and essential participants in the creation of knowledge. On successful completion of the requirements for the degree, candidates have already joined the international community of research scholars. Indeed, many complete the degree having already published in important international journals.

- *Should successful candidates be primarily seen as future academic staff or do they serve other purposes (qualified staff for the knowledge intensive economic sector etc)?*

In Australia, approximately 70% of graduating PhD students find employment outside the Academy — they hold positions in public and private research organisations, in government, in business, in the wider knowledge based economy.

It is certainly the case that those designing PhD programs and research training more generally should recognise this diversity of future careers.

It has in the past been assumed that the emphasis on independent and original research in Australian PhD programs ensures that candidates acquire a range of generic skills, in project management, research design, program implementation, presentation of results etc. that are transferable to higher level employment in diverse sectors. However, there is an increasing movement towards the inclusion of specific coursework modules within Australian PhD programs in order to make this development of transferable skills more explicit.

The Go8 Australian universities are working together towards the introduction of broadly consistent, high quality generic and specific coursework components into their PhD programs, and are considering the development of formal measures to assess students' breadth as well as depth of knowledge and skills as part of the confirmation of candidature.

- *Who develops and polices the criteria for (excellent) doctoral training? How can scientific standards be guaranteed?*

For the Australian PhD, the measurement and policing of scientific standards has generally rested on the independent external assessment of the work of those candidates who successfully complete the degree. Ensuring the quality of the examination has depended on internal university processes which seek to ensure that the chosen examiners are qualified to assess, are familiar with the standards of the PhD in an international context, and are independent of the candidate, the supervisors and of the university.

However, too great a focus on the standards of successful completions would risk identifying the quality of a doctoral training program only with its successes. Given that in Australia approximately 50% of enrolling candidates fail to complete a PhD, there needs to be other measures of the quality of programs.

The Australian Go8 universities have a number of common agreed standards for programs, and are working towards extending these. The Deans and Directors of Graduate Schools (DDoGS) meet regularly and are actively developing common standards and measures of quality in higher degree research training. Our active cooperation extends to the sharing of data, of process, and the identification and adoption of best practices from among members. Areas of continued development include:

- the selection and recruitment of high quality candidates
 - agreed common standards for selection (out of Cycle 2 degrees), language skills, candidate induction programs (including skills assessment), confirmation of candidature procedures, reporting of milestones. etc.
 - ensuring high quality supervision
 - training for supervisors (aspiring to supervisor accreditation in the future), increased use of joint and panel supervision arrangements (in contrast to sole supervision), recognition that supervision and research training more generally involves a curriculum (historically this has often been a covert curriculum)
 - ensuring high quality research facilities
 - including minimum standards of access to resources for candidates
 - ensuring high quality programs in which mobility is encouraged
 - encouraging collaboration across institutions and providing for joint PhD programs between Go8 Universities and strongly encouraging international linkages.
 - ensuring high quality examinations
 - a common approach to the setting of standards for the selection of examiners
- *What criteria should define a 'successful' doctorate (especially considering the various models of doctoral training with considerable functional differences: research doctorate, MD etc)?*

At the University of Western Australia, PhDs and 'Professional Doctorate' programs consist of a research project mutually agreed upon by a candidate, supervisor, Head of School and the Board of the Graduate Research School. The programs require the development and implementation of a rigorous research plan, based on a comprehensive understanding of the relevant literature and the need for answers to questions posed in that literature or as the result of a new theory.

A thesis at this level is expected to demonstrate, in the context of a substantial and original contribution, mastery of the subject as well as a furthering of understanding in that field of knowledge, through the discovery of knowledge, the formulation of theories, or the innovative re-interpretation of known data and established ideas.

The thesis arising from the research is expected to demonstrate a candidate's ability to document and interpret results, to formulate theories and to discuss the results in the light of the current literature to a level of competence required in published materials.

2. What is the institutional mission of your graduate education and how is this achieved through your recruitment, selection and admission processes and institutional framework conditions?

The University of Western Australia sees its graduate research education as integral to its standing as an international research intensive university (currently ranked 4th in Australia, 113th in world by Shanghai Jiao Tong index).

In order to further our research agenda we are committed to increasing the number of graduate students successfully completing research degrees at UWA. This means increasing the number enrolling, increasing the proportion who successfully complete, and reducing the average time to completion. That is, we are committed to growing the Graduate School and on improving the results it achieves. This active recruitment must have a strong international perspective not only because it is very clear that the current growth in Australian graduate research programs is mainly due to international enrolments, but also because we are committed to attracting the world's best.

- *What does your institution do to actively recruit talented doctoral candidates? What are the most suitable formats for marketing and recruitment to doctoral programmes?*
- *How do you ensure or enhance the attractiveness of your doctoral programmes? What kind of support is necessary in order to successfully integrate doctoral candidates?*

Analysis of sector-wide Australian data indicates that most research students are attracted to an institution by the opportunity to work with specific individuals as supervisors, and in specific teams of researchers. More generally, Australian PhD programs appeal to international doctoral students for a range of reasons. Research suggests that the Australian research context is seen as pioneering, practical and progressive, and that the quality of supervision and relationships between research students, their supervisors and the wider research teams are viewed as relatively open and relaxed. The shorter three year PhD is also seen as a positive — though in reality average completion times are closer to four years.

Active recruitment of talented doctoral candidates is most often and most effectively a grass-roots exercise and evidence suggests that it is most successfully managed at the local level — that is, by individual research groups making connections through their national and international networks.

Students who chose to take a research higher degree typically cite a defining moment, some experience that hooked them and turned them on to research. Such moments are more likely to involve a personal interaction with a particular researcher or research team. For Australian domestic students this 'turn on' typically happens in the Honours year — the optional fourth year of the Bachelors degree which includes a large research project (usually comprising 50% of the year's assessable work). Some Go8 universities offer competitive visiting scholarship programs for upper level undergraduate students, placing them in research teams for a month or two in the summer vacation. These students may then return to their home institution to complete Honours before opting to take their PhD where they held the summer scholarship. Similar programs for international students from partnered or networked universities outside of Australia are also in development.

However, this grass-roots recruitment must be supported by centralised and efficient support. Increasingly, we rely, as do others on a web presence, a dedicated International Office and a centralised Graduate Research School. What most often makes the difference in recruitment, where a student may be considering a range of different PhD programs, is the speed, efficiency and *individualised* responses to their initial queries.

Students are looking for the 'whole package' — ideally there needs to be a clear and well managed recruitment including timely and clear advice on available scholarships and stipends, information on housing options, family support, access to schooling for children, visa assistance, together with individualised contact with a nominated supervisor etc. etc.

Successful integration includes a number of often very small, simple and easily overlooked issues, including:

- airport pick-up (by supervisor, e.g.)
- short-term initial accommodation
- start-up stipend funds (for household items)

Integration into the research program and the university more generally, includes

- initial personalised orientation
- close initial support and monitoring of progress,
- skills audit and provision of general and specific training
- confirmation of candidature plan (12 months milestone)

UWA has instituted a program specifically designed for international students (*FIRST*: Facilitating International Research Students' Transition). The UWA Graduate Research School has three dedicated Graduate Education Officers, who deliver the *FIRST@UWA* program as well as other orientation and skills workshops for research students, extending throughout the candidature period. Other Go8 Australian universities have similar programs.

3. What is an ideal doctoral candidate for your institution, how do you select them and who sets the quality standards?

- Who may, and who may not apply? How accessible should doctoral programmes be?
- What meaning does a Masters degree have (should it be integrated in the doctoral programme or should it act as an eligibility test)? Should access to doctoral programmes only be granted once the graduate has achieved more than a defined 'minimum' (grades etc)?

The path to an Australian PhD program for domestic students is most often the Bachelors degree with a good Honours result (first class or upper second class); that is, a four year degree in which the final year includes a research dissertation. Applicants are considered against this benchmark and so need to demonstrate a preparation for research that is understood to be equivalent to that achieved through completion of a good Honours dissertation. However, given that the proportion of candidates entering PhD programs immediately following completion of an Australian Honours degree is declining, there is an increasing need to develop more specific criteria to enable the assessment of potential candidates.

Research Masters degrees have declined in popularity and enrolments are roughly 10% of those in PhD programs. Most Australian universities currently provide arrangements for the upgrading of a Masters candidature to PhD candidature and many students do this. Coursework Masters degrees are considered to provide the basis for entry to a PhD program depending on whether or not the Masters candidature includes a research project equivalent to an Honours project and for which the candidate has achieved the equivalent of at least a 2A Honours result.

Australian Universities are currently revisiting the relationships between the Honours year, the research Masters and the PhD, in order to provide a range of exit options and to explore articulation arrangements between Cycle 1 and Cycle 3 degrees. A range of Masters degrees will continue to be offered as courses in their own right, while many will also be articulated into PhD programs. There will continue to be variations on a 3+2+3 model in which the Cycle 2 'sandwich' will consist of a combination of 'research preparation/training' coursework and a smaller research project. The retention of the Honours year will fit within this structure.

- *How, on one hand, can the 'selection of the best' be balanced with providing a general increase in the number of doctoral candidates?*

In Australia, government funding for research higher degree students (the Research Training Scheme) involves two components — a component for student load (limited to four years) and a large component for completion. It is simply not cost-effective for universities to be enrolling students who do not complete and so there is a clear financial driver to ensure that the best students are selected at entry to the program. The completion driver also encourages careful attention to progress and encourages continued investment in support for candidates during their enrolment. There is thus no incentive to increase enrolments at the expense of quality.

- *Qualitative selection: According to which methods can competence in the subject field, communicative and social abilities be compared and evaluated during competitive recruitment procedures? What is the role of these aptitude tests? How broad or how specialised should the gathered qualifications and competencies be?*

The Australian system uses the Honours year as a proxy for measuring competence in the subject field and the communicative skills necessary for research (both the writing and oral presentation of research results are graded in the Honours year). Assessments of equivalent competence — i.e. the assessment of project research completed in industry and government, of published papers etc. — are typically made by the nominated supervisor and are endorsed by authorised officers (in our case, the Head of School and the Dean of the Graduate Research School).

The Go8 Australian universities have an agreed minimum entrance standard of competency in English (IELTS 6.5 overall with no less than 6.0 in other test components). Interviews with prospective candidates are not mandatory (difficult to arrange in the world's most isolated capital city!) and thus broad competencies (such as social competencies) are very often assessed from referees reports.

- *Quantitative Selection: How many doctoral candidates can be supervised within a single programme or graduate school? Who decides over the admission of applicants with more formal (senior) needs for access? How should unsuccessful applicants be dealt with?*

The Australian government provides a certain number of Research Training Scheme (RTS) places to each Australian University based on a calculation of its capacity to deliver and record in delivering PhD completions. The government also provides stipends (Australia Postgraduate Awards). The number of APAs is less than the number of places, and students are awarded these on a competitive basis. We also enrol fee paying international students. The government provides a smaller number of International Postgraduate Research Scholarships. UWA does not place a ceiling on the number of doctoral candidates that can be supervised within any program within the university, though the limits of resources (in staffing, in available laboratory space, in available stipends and scholarships) place natural constraints. We come close to but do not fill all available RTS places. While access to scholarships is competitive, there is no competition for places.

Contact with unsuccessful applicants depends very much on the nature of the initial contact. Apart from the formal notices of unsuccessful application sent by the International Office and Graduate Research School, there is contact with the research area with which initial contact was made.

Ideally, unsuccessful candidates should be given some indication as to why their application was unsuccessful and advice on how they might improve their application or on where they might seek to apply elsewhere. This will of course depend on the reasons for the unsuccessful application. For example, where the reason is failure to meet the expected levels of English language skills, we provide advice on improving these, and refer potential candidates to our own Centre for English Language Teaching. Where the unsuccessful application arises because we do not have the capacity to supervise, the applicant will often be referred to another institution. Where the applicant does not yet have sufficient research background in the discipline, we provide general advice on how this might be achieved.